Manual

This is a User's Manual for the EUROCOM 3100C DeskNote™
ENJOY THE PURCHASE OF YOUR NEW EUROCOM 3100 DeskNote™ .

Notice

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1999

Trademarks

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Safety Notice

A computer is a delicate device that requires careful handling. Negligence or mistaken use may cause serious damage. Before you learn to operate or use this computer, you need to understand the instruction regarding safety handling.
The following mentions the incorrect handling that is seriously inhibited. To keep the computer from being damaged, please keep these precautions in your mind.

Do not turn off power during operation.	*Do not place the computer on an unstable surface.*
Do not turn off the peripheral devices when the light is on.	*Do not touch the poisonous liquid when the LCD is broken.*

Do not disassemble the computer yourself.
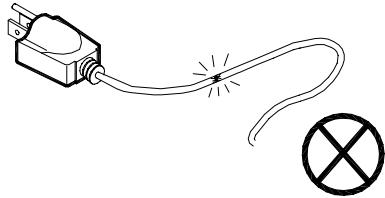
Do not place anything heavy on the computer.
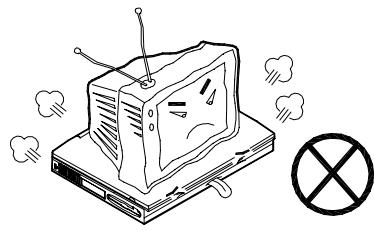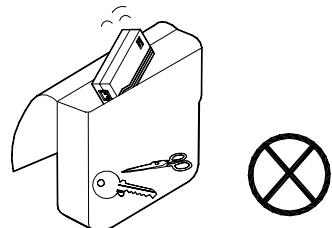
Do not touch power cord with a wet hand.
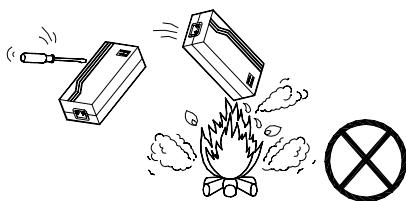
Do not use broken power cord.

Keep the computer away from any metal appliances.

Do not throw the computer or accessories into fire.

The following mentions the actions that are important for your computer. To keep your computer in the most excellent condition, please follow the instruction as much as possible.

If there is unusual odor, heat or smoke, plug out the power cord immediately.	***Unplug the power cord when attaching peripheral devices.***
Follow the airline instructions when traveling with your DeskNote™..	**Use the appropriate accessory model of peripheral device for your DeskNote™.**
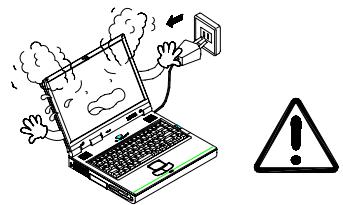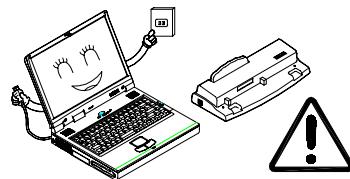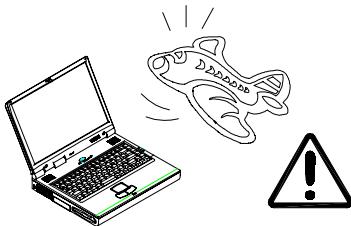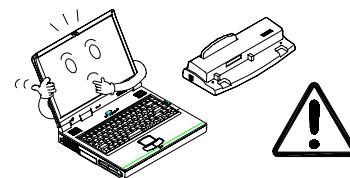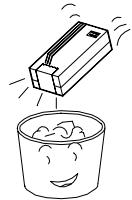
Maintain your computer regularly.

Do not place heavy thing on the power cord.

Affix tape to the contact plate while putting the battery into keeping box.
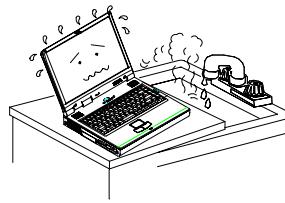
Take a rest after a long term of work.

The data is easy to lose in low power status.

Please keep the computer away from humid environments.

Conventions

This manual uses the following conventions to describe, identify, and highlight terms and operating procedures.

Text Conventions

Text in boldface contains messages that are important for safe operation. Please read.

Characters in boldface represent specific items or keys, e.g. **CardBus, Fn** key.

File names are presented in bold capitals, e.g. **A:\>0VMAKFIL /Pn**.

Abbreviations

For the purpose of clarity, abbreviations are enclosed in parentheses following their definition; for example, Enhanced Parallel Port (EPP) mode.

Icons

Icons identify ports and jacks of the DeskNote computer. The system status indicators are also identified with their relative icons.

Keys

Keys appear in boldface. A plus sign (+) between two keys indicates that they should be pressed simultaneously.
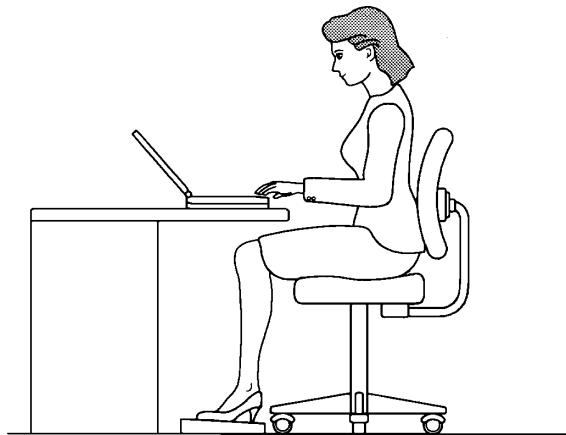
Messages

Note:A note is an advice that helps you make best use of your DeskNote computer. Please read.

Ergonomics

Developing good work habits are important if you need to work in front of the computer for long periods of time. Improper work habits can result in discomfort or serious injury from repetitive strain to your hands, wrists or other joints. The following are some tips to reduce the strain:

◯ Adjust the height of the chair and/or desk so that the keyboard is at or slightly below the level of your elbow. Keep your forearms, wrists, and hands in a relaxed position.

◯ Your knees should be slightly higher than your hips. Place your feet flat on the floor or on a footrest if necessary.

◯ Use a chair with a back and adjust it to support your lower back comfortably.

◯ Sit straight so that your knees, hips and elbows form approximately 90° angles when you are working.

Lighting

Proper lighting and comfortable display viewing angle can reduce eye strain and muscle fatigue in your neck and shoulders.

○ Position the display to avoid glare or reflections from overhead lighting or outside sources of light.
○ Keep the display screen clean and set the brightness and contrast to levels that allow you to see the screen clearly.
○ Position the display directly in front of you at a comfortable viewing distance.
○ Adjust the display viewing angle to find the best position.

In addition, continuous concentration on computing work can result in discomfort and injury. Remember to:

○ Alter your posture frequently.
○ Stretch and exercise your body several times a day.
○ Take periodic breaks when you work at the computer for long periods of time. Frequent and short breaks are of greater benefit than fewer and longer breaks.

Chapter 1 : *Getting Starte d*

This chapter provides you with the brief introduction to the DeskNote. It will familiarize you to the computer's features, components, operating environment and the power sources.

☞ **Unpacking the DeskNote**

☞ **Features of the DeskNote**

☞ **Operating environment**

☞ **Powering the system**

Unpacking EUROCOM 3100 DeskNote

Carefully unpack the EUROCOM DeskNote and the included accessories (Figure 1-1). If there is any discrepancy or problem, contact your dealer immediately. Be sure to save the packing materials in the event that the DeskNote needs to be shipped in the future. The shipping carton should contain the following items:

- ❍ DeskNote computer
- ❍ Drivers/Manual CD
- ❍ PS/2 Transfer Cable
- ❍ Carrying Bag
- ❍ Battery Pack
- ❍ Utilities Diskette
- ❍ Power Cord
- ❍ Power Adapter
- ❍ Operating System (optinal)
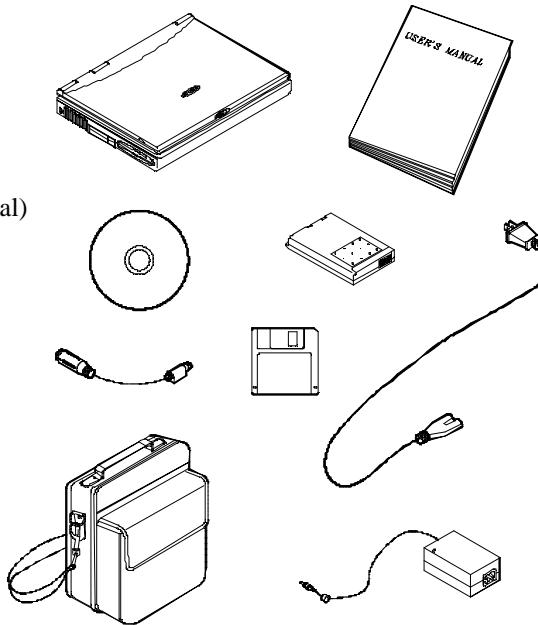
Figure 1-1

Features of EUROCOM 3100 DeskNote

Opening the LCD Cover

1. Push the latch towards the right to open the top cover. (Figure 1-2)
2. Lift the top cover to reveal the LCD panel and the keyboard.
3. Adjust the LCD panel to a comfortable viewing angle.
4. Press the power button to turn the system on or off (Figure 1-4).
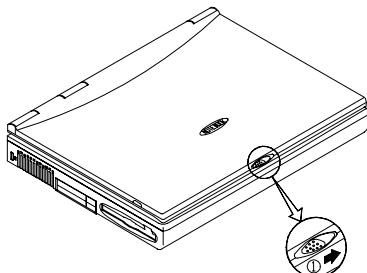
Figure 1-2
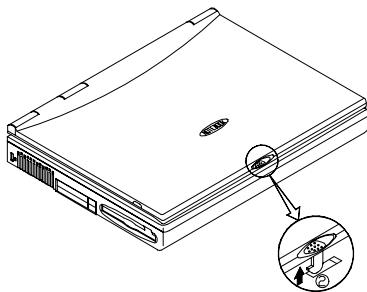
Figure 1-3

System Status Indicators
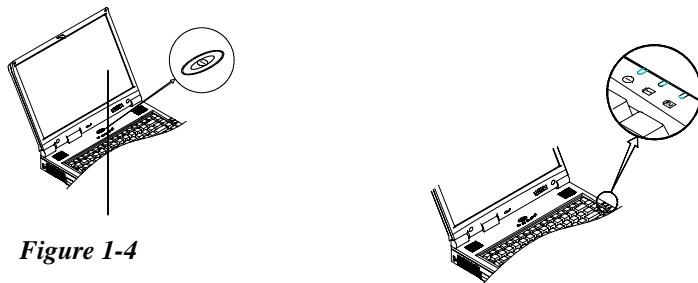
Figure 1-4

Power button

Use this button to turn the system on or off (Figure 1-4). After proper configuration under SCU, this button can be used as suspend/resume hot button (refer to Chapter 3: BIOS Utilities, Power Menu for more information).

Figure 1-5

Note: After turning off the system, wait for a few seconds to power it on again.

System Status LED Indicators

The LED indicators show the system's operation status.

Icon	Color	Description
⏻	Green	Battery power is used with the system turning on.
	Red	AC power is used with the system turning on.
	Blinking Red	Battery power is critically low.
🔋1	Green	1st Battery is fully charged.
	Red	1st Battery is being charged.
🔋2	Green	2nd Battery is fully charged.
	Red	2nd Battery is being charged.
🔒1	Green	The embedded number-lock feature is activated
🔒A	Green	The Caps Lock feature is activated.
🔒⇅	Green	The Screen Lock feature is activated.
☽	Green	The system has entered the configured suspend mode.
🗄	Green	The hard disk is being accessed.

Note

When the battery is being charged and the temperature of the battery reaches a certain heat, LED indicators will show blinking light.

Top-Front View
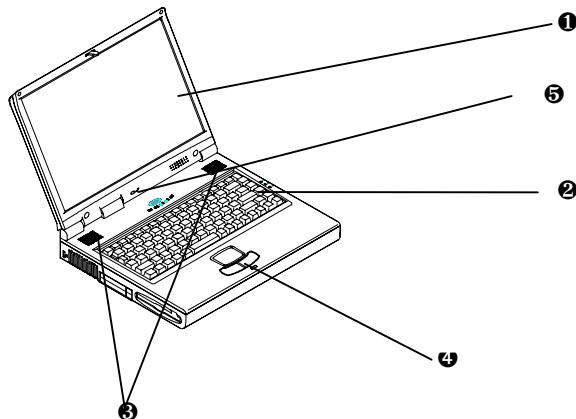
Figure 1-5

❶ LCD Panel

The EUROCOM DeskNote is equipped with a LCD (Liquid Crystal Display) panel Depending upon the model you have purchased, the display screen can be a 13.3" or 14.1" XGA TFT color panel. The DeskNote's LCD panel supports up to $1024 \times 768 \times 16M$ resolution. The LCD panel is driven by a AGP bus video controller with 8MB video memory.

Figure 1-6

❷ **Keyboard**

The DeskNote uses an 88-key keyboard in which the numeric keypad is embedded. It supports Windows 95 by incorporating two Windows 95 special keys. The DeskNote keyboard design emulates a full-sized desktop one and supports various language versions. Please refer to chapter 2: Operation for more information on using keyboard.

❸ **Stereo Speakers**

Two built-in speakers provide clear stereo sound.
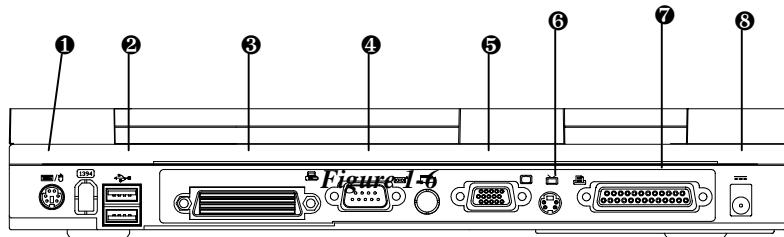
❹ **Trackpad and Buttons**

The pointing device features a sensitive glide pad for precise movements. It is compatible with the IBM PS/2 mouse. The buttons of the trackpad function as those of a standard mouse.

❺ **Microphone**

This is the built-in microphone for recording sound into your applications.

Rear View

❶ PS/2 Type Ports ⌨\🖱

The PS/2 Type Port uses 6-pin connector for connecting an external PS/2 type mouse or keyboard.

❷ Dual USB Ports •⟜→

The dual Universal Serial Bus (USB) ports simplify the expansion capability for peripheral devices. You can optionally connect the USB

❸ Expansion Port

The Expansion port uses a 120-pin Docking connector for connecting a Port Replicator.

❹ Serial Port |O|O|[1]

The RS-232C serial port uses a 9-pin male connector for connecting an external serial mouse, serial printer or fax/modem.
devices such as a mouse, keyboard or monitor to the DeskNote.

❺ External Monitor (CRT) Port

The External Monitor uses a 15-pin connector for connecting an external CRT monitor. Simultaneous display in LCD screen and external CRT monitor is available.

❻ S-video Jack

Use this jack to transmit video signal to a TV set. You may need to select the video standard (NTSC/PAL/NTSC-Japan) for video display (please refer to Chapter 3, Components Menu for more information).

❼ Parallel Port

The Parallel Port uses a 25-pin female connector for connecting a parallel printer or other parallel devices. This parallel port supports EPP (Enhanced Parallel Port) V1.7/V1.9 and ECP (Extended Capabilities Port) modes.

❽ AC-in Socket

Plug the AC adapter into this socket for power supply. Pull the plug (not the cord) directly back to disconnect.

Right-side View
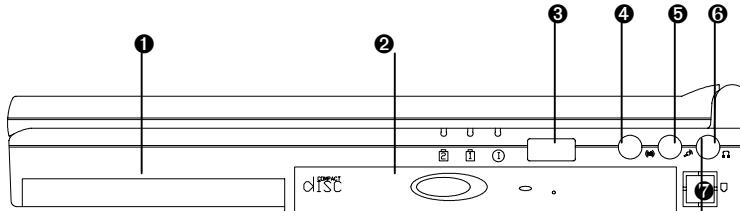
Figure 1-7

❶ Battery Pack

The DeskNote comes with a rechargeable battery pack that lets you operate the computer without an external power source.

❷ Removable 5.25" CD-ROM Drive

The DeskNote comes standard with a 24-speed 5.25" CD-ROM drive. The removable CD-ROM drive module can be replaced with the optional drive units, such as a 12.7mm high DVD-ROM drive. (Please refer to the Chapter 2: Operation for more information on using the CD-ROM.)

❸ Infrared

The DeskNote is equipped with an infrared feature that allows the communication with an infrared-compatible device. The Infrared port supports IrDA (HPSIR) 1.1 mode, Amplitude Shifted Keyed IR (ASKIR) mode, and Fast IR (FIR) mode.

❹ Line-in Jack

External audio source can be fed into the DeskNote through this jack.

❺ Microphone-in Jack

Use this jack to connect a microphone to the system.

❻ Speaker-out Jack

Headphone and speakers can be attached to the system through this jack.

❼ Phone Jack (option)

The phone jack is used to support the built-in modem. You can attach a phone line to the jack and insert a modem card (optional) into the modem socket on the mainboard.

Left-side View
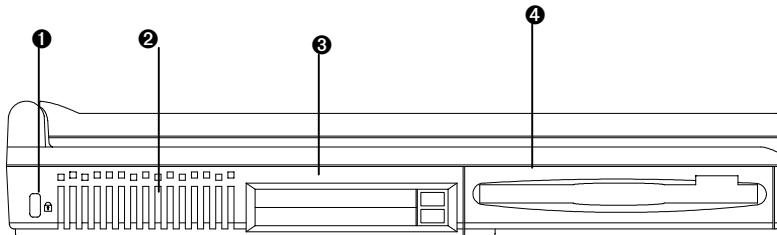
Figure 1-8

❶ Security Connector

The Security Connector is used to protect your DeskNote from being stolen. Wrap the steel cable around your desk. Next, insert the locking device into this security connector.

❷ Ventilation

The DeskNote provides ventilation to dissipate the system's operating heat. Do not block or obstruct it during operation.

❸ PC Card Sockets

The DeskNote provides two Type II or one Type III PC card sockets. Both sockets will expand the system capabilities when a PC card is inserted. (Please refer to Chapter 2: Operation for more information on Using PC Card socket.)

❹ Removable 3.5" Floppy Disk Drive

The DeskNote comes standard with a removable 3,5" 1.44MB floppy drive installed in a bay. The floppy disk drive module can be replaced with optional drive units, such as a 12.7mm high 2.5" hard disk drive, a 12.7mm high LS-120 120MB floppy drive or a secondary battery pack. (Please refer to Chapter 2: Operation for more information on using floppy disk drive.)

Bottom View
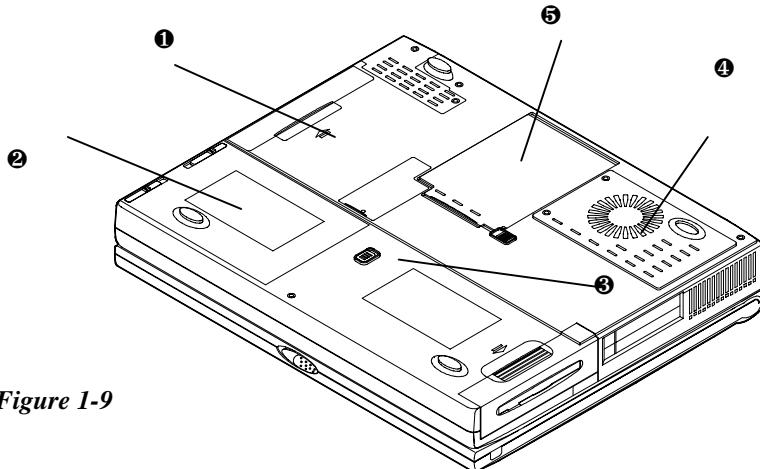
Figure 1-9

❶ CD-ROM latch

Push this latch to release the CD-ROM module from its bay. (Please refer to Chapter 2: Operation for more information on inserting or removing the CD-ROM.)

❷ Battery Pack latch

Push this latch to release the Battery Pack from its bay. (Please refer to Chapter 1: Getting Started for more information on Inserting or removing the Battery Pack.)

❸ Floppy Disk Drive latch

Push this latch to release the Floppy Disk Drive module from its bay. (Please refer to the Chapter 2: Operation for more information on inserting or removing the Floppy Disk Drive.)

❹ CPU Cover

Detaching the screws to remove the cover. The CPU module is under the heat sink and the cover. You may upgrade the CPU for higher system performance.

❺ Hard Disk Drive latch

Push this latch to release the Hard Disk Drive module from its bay. (Please refer to Chapter 2: Operation for more information on Inserting or removing the Hard Disk Drive.)

Operating Environment

Proper care and operation of your EUROCOM DeskNote will prolong the use period. Make sure the computer is not:

❍ Exposed to excessively heat or direct sunlight.
❍ Subjected to shock or vibration.
❍ Exposed to strong magnetic fields.
❍ Left in a place where foreign matter or moisture may enter the system.
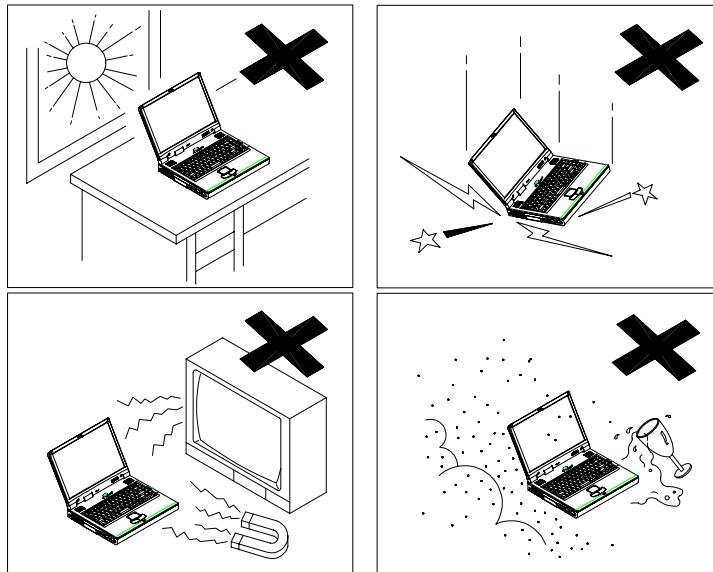
Figure 1-10

Powering the System

You can use the AC power adapter or battery pack to power the computer system.

AC Power Adapter

Use only the power adapter that comes with your DeskNote Computer. Use the incorrect power adapter will cause damage to the DeskNote and its components.

1.   Plug the power adapter to the AC-in socket on the rear panel of the DeskNote.
2.   Connect the power cord to the power adapter.
3.   Plug the AC power cord into a properly grounded outlet.
4.   Refer to Chapter 1, System Status Indication for more information on system power status.
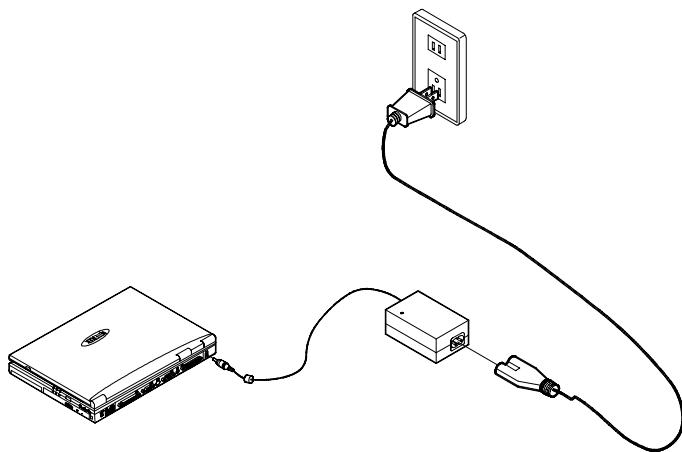
Figure 1-11

Battery Pack

Power for continuous portable operation of the DeskNote is provided by a battery pack. When the battery pack is fully charged, you can operate the computer for approximately two hours. However, the actual operating time will be determined by the application used and the configuration set.

Removing

Turn the DeskNote over.
1.   Locate the Battery Pack latch Push the latch in the direction as indicated.
2.   Draw the battery pack out the bay.

Inserting

1.   Turn the DeskNote over.
2.   Insert the battery pack into the bay.
3.   Make sure the battery clicks into the bay properly and mates with it connector firmly. (You will hear the battery pack clicks shut).

Figure 1-12

Recharging by AC Power

The system's battery pack will recharge whenever the system is plugged into the AC power supply, regardless of whether the system is being operated or not.

1. You may connect the AC power adapter to the DeskNote Computer at any time to begin recharging the system's battery pack. You do not need to turn off the system's power.
2. It will take several hours to recharge the battery to its full charge status.
3. Please refer to Chapter 1, System Status Indicators for more information on battery charge status.

Proper Handling of the Battery Pack

❍ Do not attempt to disassemble the battery pack under any circumstances.
❍ The battery may explode if exposed to fire or high temperatures.
❍ Avoid short circuiting the battery by preventing contact between the metal terminals (+, -)

Chapter 2 : **Operation**

The DeskNote has many advanced features to help you with your computing work. This chapter describes each of the DeskNote's hardware features and shows you how to use them.

Before you begin working with any internal components of the DeskNote, remove the battery and disconnect the AC power adapter.

Make sure that you wear an anti-static wrist strap to ground yourself before working with any internal components of the DeskNote. Static electricity may damage components.

☞ **Upgrading Processor Module**

☞ **Setting DIP Switch**

☞ **Using Hard Disk Drive**

☞ **Using Floppy Disk Drive**

☞ **Using CD-ROM**

☞ **Using PC Card Sockets**

☞ **Using Hot Keys**

☞ **Using Numeric Keypad**

☞ **Using Power Management**

☞ **Attaching Peripheral Devices**

Upgrading Processor Module

Replacing Processor Module

1.   Remove all power sources (AC power and battery).
2.   Turn the DeskNote over.
3.   Remove the CPU cover.
4.   Remove the screws that fasten the heat sink mounted on the Processor Module.
5.   Carefully use the CPU removing tool to detach the Processor Module from the mainboard.

Note:

Wait for the CPU to cool down before replace it.
Contract your dealer for the CPU tool to replace the CPU.

CPU Cover

Heat Sink

CPU Module
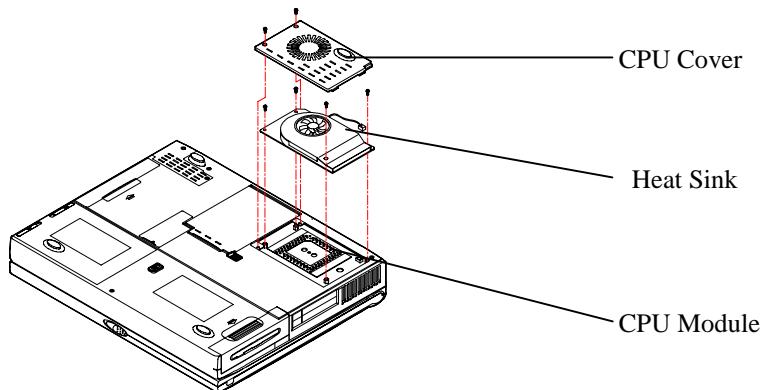
Figure 2-1

Reinstalling the Heat Sink

Make sure that the heat sink cable is properly placed.
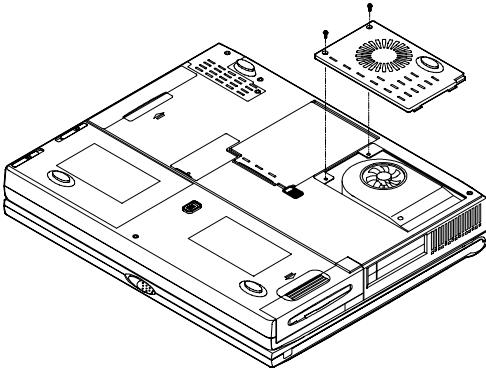
Figure 2-2
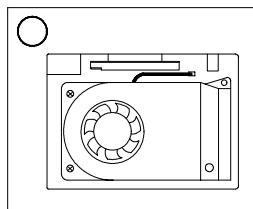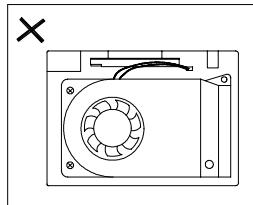
Figure 2-3

Setting DIP Switch

Flash ROM BIOS update

In order to keep up with the latest system BIOS, your DeskNote may be upgraded. Consult your dealer for further information. The DIP-Switch needs to be set in the **On** position when updating the existing system BIOS. The DIP-Switches should be reset to the **Off** position after BIOS updating is complete.

DIP Switch (SW1)		Purpose
SW1-1	**SW1-2**	**Flash ROM BIOS**
Off	Off	Existing BIOS
On	On	Updating BIOS

CPU Core Frequency Settings

It is not necessary to make any changes to jumper settings. The Core Frequency will auto configure one the system s powered on.

Celeron & BGA1 Processor VTT Select		
CPU Frequency	**S3-1**	**S3-2**
1.5V (Socket 370)	ON	ON
1.6V (BGA1)	OFF	OFF

Accessing 8-Pole DIP Switch

Access the 8-Pole DIP Switch to set the CPU Frequency.
1.   Turn the system power off.
2.   Press the two keyboard latches and Carefully lift the keyboard assembly out to
       expose the mainboard. Adjust the DIP Switch to set the configuration.
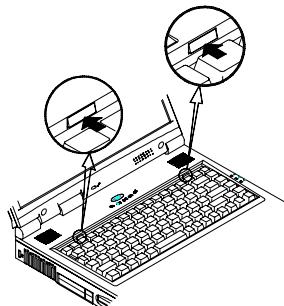
Figure 2-4
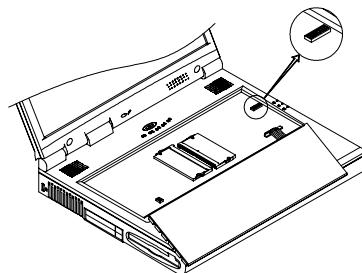
Figure 2-5

Expanding Memory

The system has three memory sockets for different RAM modules to expand the memory up to 256MB. These RAM modules are of a 144-pin SODIMM (Small Outline Dual In-line Memory Module) type. The DeskNote supports EDO, and SDRAM operation. The total memory size is automatically detected by the POST routines. With the following different RAM combinations (for reference), the total memory size can be:

Bank 0 (64-bit)	Bank 1 (64-bit)	Power	Minimum Speed	Total Size
32MB	0MB	3.3V	EDO: 60ns SDRAM:75 MHz	32MB
32MB	32MB			64MB
64MB	0MB			64MB
64MB	32MB			96MB
64MB	64MB			128MB
128MB	0MB			128MB
128MB	32MB			160MB
128MB	64MB			192MB
128MB	128MB			256MB

Note: You can not use the EDO RAM and SDRAM together.

Accessing the Memory Sockets

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from it normal position.
3. Carefully lift the keyboard assembly out so that the mainboard is exposed.
   Locate the memory sockets (Figure 2-6/7).

Note:
- **The memory socket Bank is a reverse type, make sure you install the memory module with reverse side to fit its connector.**
- **Please ensure that each edge of the memory module (SDRAM) has no component mounted on (see Figure 2-6). It is recommended to use the RAM module that complies with Intel unbuffered SO-DIMM (67.6mmX31.75mm). Please consult your dealer for detailed information.**

67.6mm

31.75mm

Non-component area
(The edges of the memory module are the non-component area.)

Bank 0   Bank 1
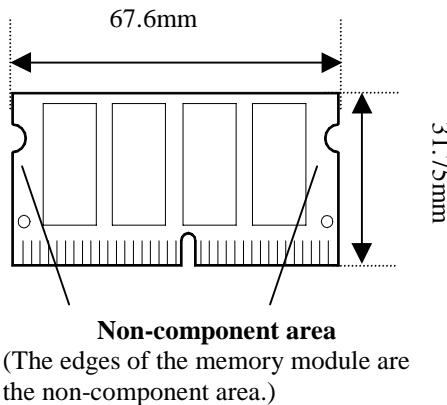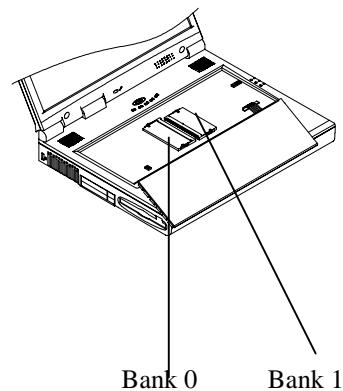
Figure 2-6

Figure 2-7

Figure 2-9

Installing Memory Module

Follow the steps below to install the memory module:

Turn the system power off. Press the two keyboard latches to elevate the keyboard from its normal position. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets .

1. **Position the memory module at a slight angle (45)** and fit its connectors into the socket firmly.
2. **Press two edges of the memory module (as the arrows indicated) to make it locked into place**.

Reinstall the keyboard assembly.

Note: Make sure you install the memory module in the order of Bake 0, Bank1.
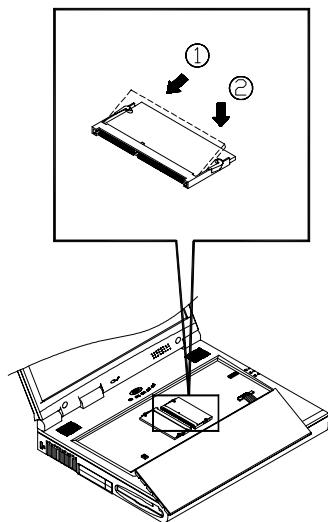
Removing Memory Module

Turn the system power off. Press the two keyboard latches to elevate the keyboard from its normal position. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets.

1.   Gently pull the two latches on both ends of the module outward.
2.   The module will pop up.
3.   Remove the memory module.
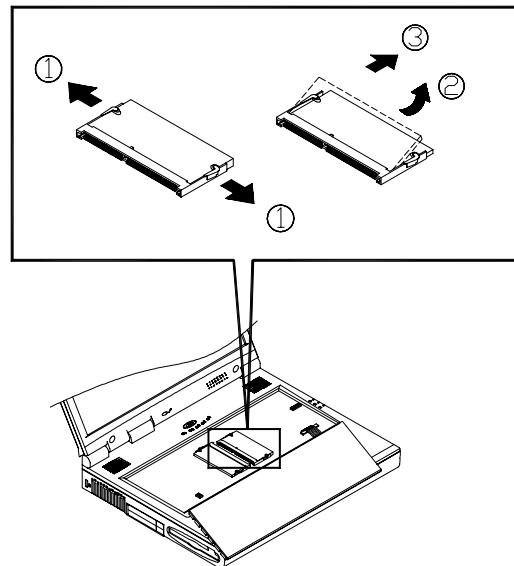
Figure 2-9

Using Hard Disk Drive

The DeskNote is equipped with a 2.5" IDE hard disk drive mounted in a removable case. Therefore, the hard disk drive can also be easily removed and replaced with another hard disk drive with a height of 17mm by using different case. The hard disk drive supports Programmed I/O (PIO) mode 4, Master mode and Ultra ATA (Ultra DMA-33) mode which can provide a high performance data transfer rate at speeds up to 33 MB/second.

Removing the Hard Disk Drive Module

Turn off the power. Turn the DeskNote over.
1.   Push the latch in the direction as indicated.
2.   Pull the hard disk cover up.
3.   Draw the hard disk drive module out of the bay.
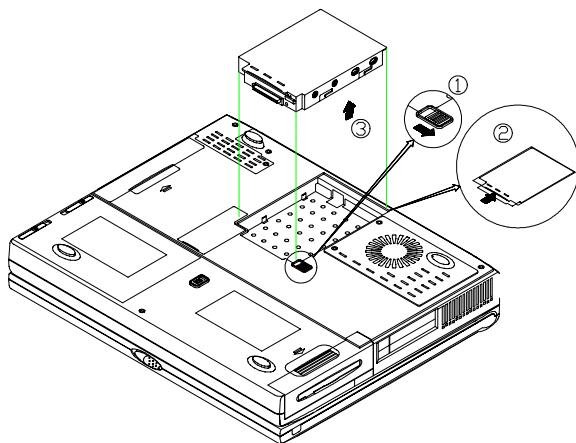
Figure 2-10

Replacing Hard Disk Drive

1. Remove the two screws on each side of the case. (Figure 2-11)
2. Gently disconnect the cable from the hard disk drive.
3. Connect the replacement hard disk drive with the cable.
4. Insert the replacement hard disk drive into the case.
5. Fasten the screws of each side.

Note: The hard disk drive with different height must use the different case to house itself. Contact your dealer for details about these replacements.
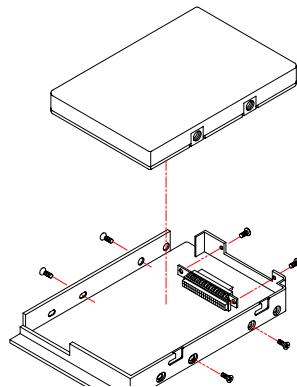
Figure 2-11

Inserting the Hard Disk Drive Module

1. Insert the hard disk drive module into the bay
2. Make sure it clicks into the bay properly and mates with the connector firmly. (You will hear the latch clicks shut.)

Using Floppy Disk Drive

The DeskNote is equipped with a removable 1.44MB, 3.5" floppy disk drive module. It is usually designated as drive A by default and may be used as a boot device if properly set (please refer to Chapter 3, BIOS Utilities).

You may replace the floppy disk drive module with the following options: a 2.5" secondary IDE hard disk drive (of 12.7mm high), a 120MB LS-120 floppy disk drive (of 12.7mm high), or a secondary battery pack. Contact your dealer for detailed information about these options.

Inserting/Removing Diskettes

Always insert your floppy diskette label-side up when using the floppy drive. Press the eject button on the top-right corner of the floppy drive to remove your diskette.
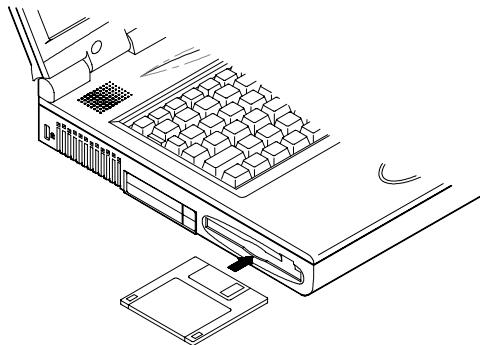
Figure 2-12

Replacing Floppy Disk Drive

Turn off the power. Turn the DeskNote over.
1.   Push the latch in the direction as indicated. (Figure 2-13-1)
2.   Draw the floppy disk drive module out of its bay.
To assemble the floppy disk drive module into the bay.
3.   Insert the replacement module into the bay.
4.   Make sure it clicks into the bay properly and mates firmly with the connector.
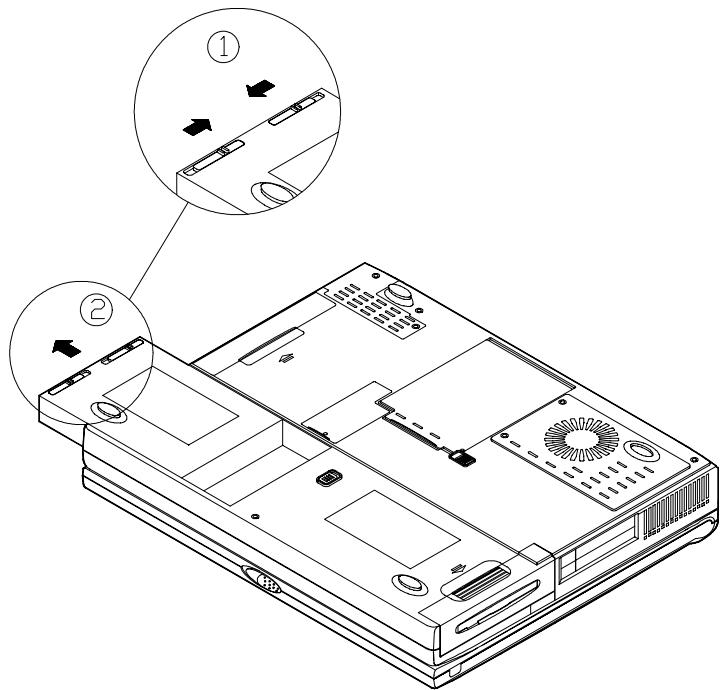   (You will hear the latch clicks shut).
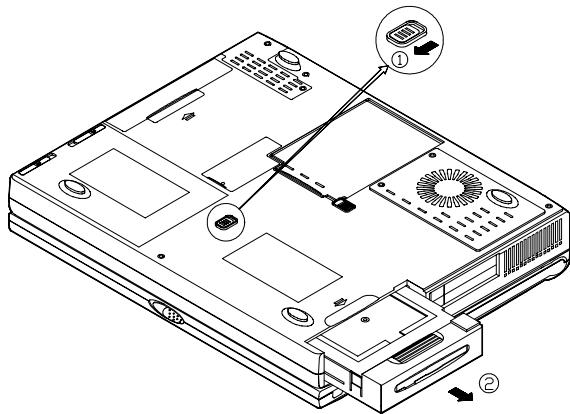
Figure 2-13

Write-Protecting Diskettes

Diskettes can be write-protected to prevent files from being accidentally erased or destroyed. To write-protect a 3.5" floppy diskette, move the built-in write-protect tab to the write-protect position, ("up" so that you can see through the "hole" in the upper, right-hand corner of the diskette). Putting the write protect tab back "down' will enable you to write data on the disk again.

Do's and Don'ts

❍ Always make backup copies of your software and data diskettes.
❍ Keep diskettes away from magnetic fields.
❍ Do not remove diskettes from the drive while the diskette "in-use" light in on.
❍ Do not open or remove the protective shutter that covers the diskette's media.
❍ Do not allow dust or moisture to collect on diskettes.
❍ Do not bend or throw diskettes.
❍ Do not clean diskettes with liquids or solvents.

Using CD-ROM

The DeskNote is equipped with a removable CD-ROM drive module. It is usually
designated as drive D by default and may be used as a boot device if properly set
(please refer to Chapter 3, BIOS Utilities). You may replace CD-ROM drive module
with following options, DVD-ROM drive (of 12.7mm), CD-RW drive or the third
battery pack.

To insert a CD, press the **Eject Button** and place the CD on the **Disc Tray** label-
side facing up. Push the CD tray in and you are ready to start. The **Busy Indicator**
will light up while data is being accessed or while an audio CD is playing. When
power to the system is unexpectedly interrupted, insert an instrument such as a
straightened paper clip into the **Emergency Eject Hole** to manually eject the tray.

Disk Tray

Emergency Eject Hole

Busy Indicator

Eject Button
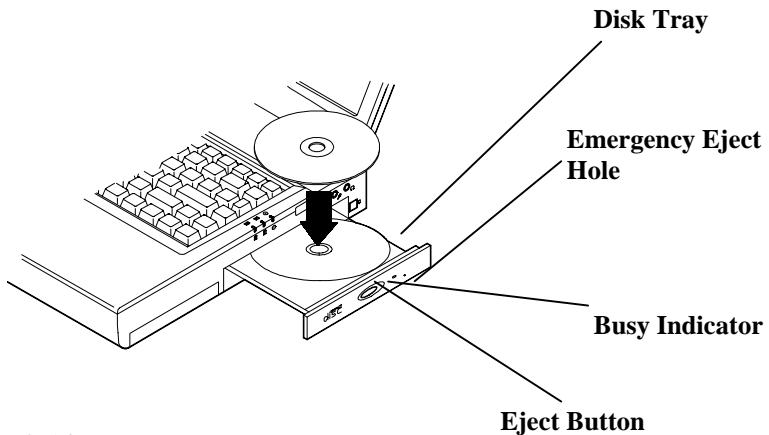
Figure 2-14

Removing CD-ROM Module

Turn off the power. Turn the DeskNote over.
1.   Take the cover away as the figure.
2.   Push the latch in the direction as indicated.
3.   Draw the CD-ROM module out of the bay.

Note: Do not disassemble the CD-ROM module by yourself. Only certified technicians should perform repairs to the CD-ROM module.
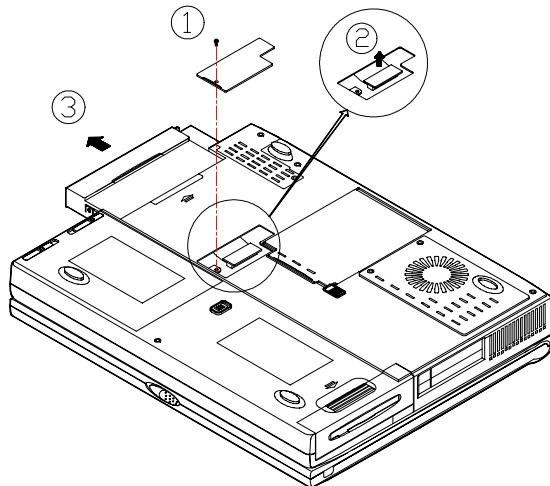
Figure 2-15

Loading Compact Discs

1.   Turn on the power.
2.   Press the CD-ROM eject button; the disc tray will pop out partially.
3.   Gently pull the disc tray out.
4.   Carefully load the CD on the disc tray with label-side facing up. Make sure the
      CD is seated properly.
5.   Push the tray into the computer to close it.
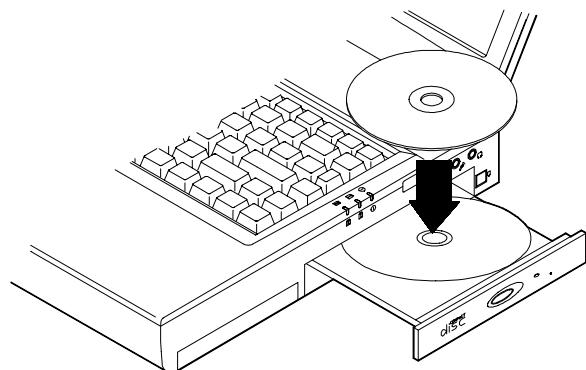
Figure 2-16

Figure 2-16

Handling of Compact Discs

Proper handling of your CDs will prevent them from being damaged and ensure the accessibility of data stored on them.

❍ Hold the CD by the edges; avoid touching the surface of the disc.
❍ Use clean, soft, dry cloth to remove dust or fingerprints.
❍ Do not use pen to write on the surface.
❍ Do not attach any paper or other materials to the surface of the disk.
❍ Do not store or place the CD in areas where it will be exposed to high temperatures.
❍ Do not use benzene, thinners, or other cleaners to clean the CD.
❍ Do not bend the Compact Disc.
❍ Do not drop or subject the CDs to shock.
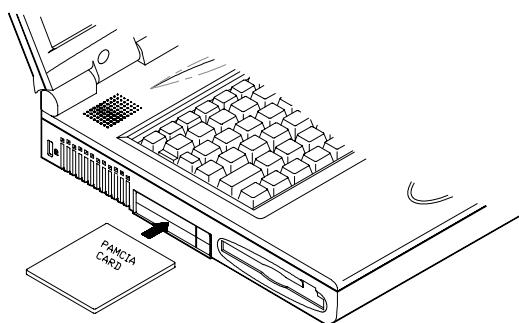
Using PC Card Sockets

PC cards can expand the capabilities of the DeskNote computer. Your DeskNote is equipped with two PC card sockets that accommodate one Type III card and two Type II cards. These sockets support both PCMCIA standard release 2.0 cards and 32-bits Cardbus (PC card 95) cards. PC cards can be LAN, fax/modem, communication devices, or expanded memory ones. These PC card sockets can accept either 3.3V or 5V PC cards.

The upper socket named socket A is capable of ZV (Zoomed Video), which allows a direct connection between a PC card and video devices that enables high quality video playback.

Inserting PC Cards

1. Open the access door of PC card sockets (Figure 2-17).
2. Align the PC card with the appropriate slot and push it in firmly until it locks into place.

Removing PC Cards

Two eject buttons are located next to each slot. Press the appropriate eject button to remove the PC card from its slot. (Please refer to Figure 2-18)

Socket A   Eject button for socket A

Socket B   Eject button for socket B
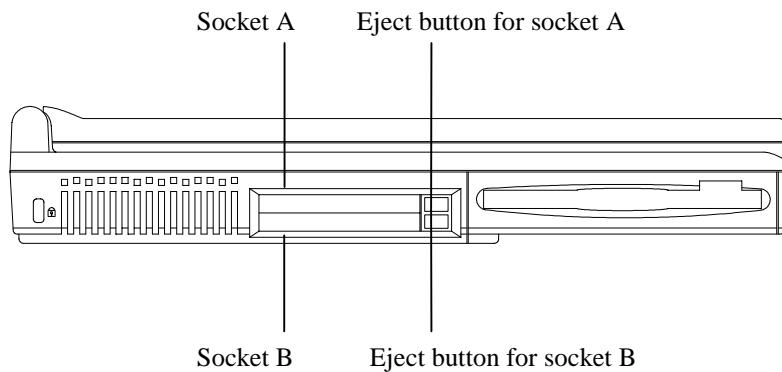
Figure 2-18

Using Hot Keys

Located on the bottom-left corner of the keyboard layout is a colored **Fn** key (Figure 2-19). It is a special feature designed only on the DeskNote for an easy access to system features. Simultaneously press **Fn** key and one of the following keys to execute specific functions:

Hot Key	*System Features*
Fn+F3	Expand LCD display
Fn+F6	Toggle CRT/LCD/LCD+CRT/TV/CRT+TV
Fn+F9	Decrease LCD brightness
Fn+F10	Increase LCD brightness
Fn+F11	Decrease audio volume
Fn+F12	Increase audio volume
Fn+Z	Toggle audio mute on/off
Fn+Esc	Suspend/resume
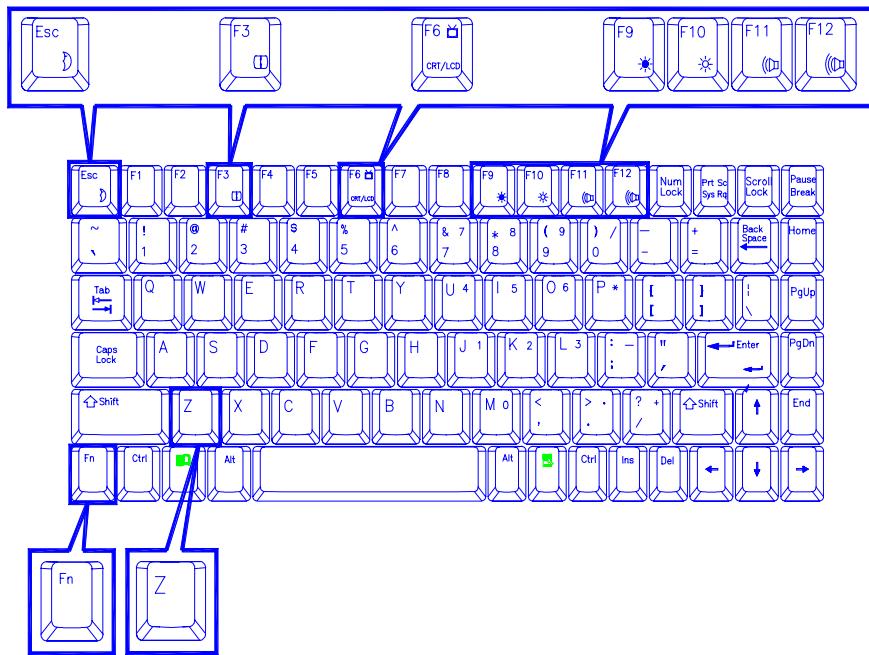
Figure 2-19
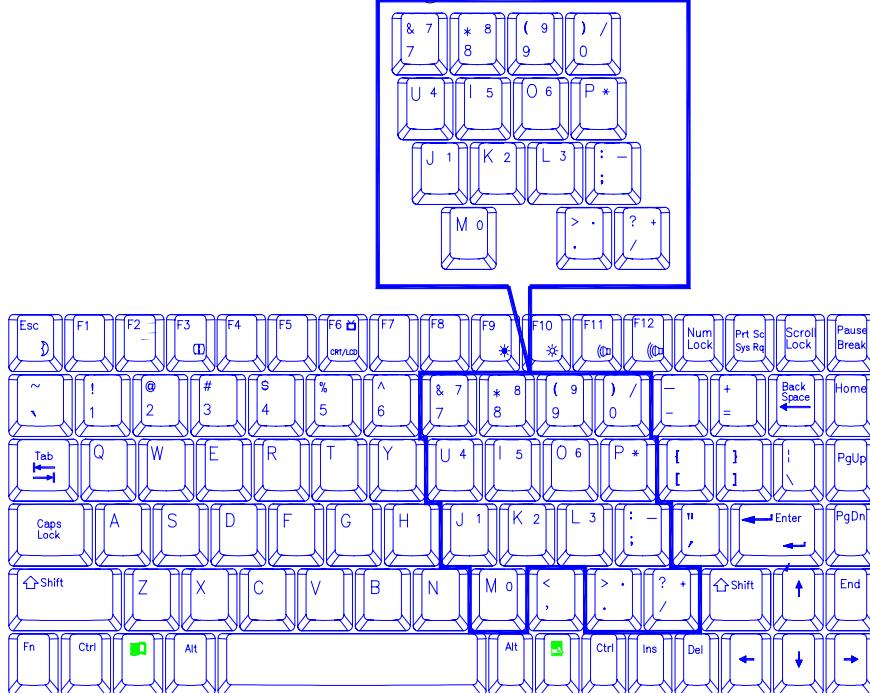
Using Numeric Keypad

The DeskNote features an 88-key keyboard with an embedded numeric keypad for easy numeric data input (Figure 2-20). The colored keys in the middle section of the keyboard will function as a Numeric Keypad. When the numeric keypad is engaged, the NumLock LED indicator shines green light.

Follow these steps to access the Numeric Keypad:

❍   Press the **NumLock** Key to activate the Numeric Keypad.

❍   Press the **Fn** key and colored keys together to activate the Numeric Keypad.

Figure 2-20

Using Power Management

The DeskNote provides you with some built-in power management features to reduce the power consumption without affecting the performance of the system.

Advanced Power Management (APM 1.2)

The DeskNote provides built-in Advanced Power Management (APM 1.2) supporting to reduce power consumption. APM function varies depending on the operating system you are using. **Some operating systems do not support APM, such as Windows NT, and therefore, cannot take advantage of the system's capabilities in this area.**

Advanced Configuration and Power Interface (ACPI 1.0)

The ACPI interface gives the operating system (OS) direct control over the power management and Plug and Play functions of a computer. The operating system can perform the functions covered by the ACPI specification, such as system power management, device power management, and thermal management.

Hard Disk Standby

The system will turn off the DeskNote's hard disk drive after a specified period of inactivity. The Hard disk drive will be turned back on once the system attempts to read or write data to it. You can adjust the Standby timeout period in the power menu of BIOS utilities

Global Standby

In Global Standby mode, the CPU clock will be stopped and most of the controllable peripheral devices will be powered off. If the idle timer expires before any system activity is detected, the system will change from Standby mode into Suspend mode.

Suspend and Resume

Under the circumstance of extremely low power, all tasks are stopped and stored in memory to save the power. This is called Suspend mode. The Suspend Mode features three levels: Powered-On-Suspend (POS) mode, Suspend-To-RAM (STR) mode and Suspend-To-Disk (STD) mode.

> *Note: Be sure not to initiate the Suspend Mode when any of the disk drives is accessed such as HDD, FDD and CD-ROM drive.*

The system operation can be returned to exactly where it was suspended when wake-up event occurs. This is called Resume.

Powered On Suspend (POS)

In these two suspend modes, Powered-On-Suspend (POS) saves the least amount of power than STD mode. However, it takes the least time to return to full operation.

Resume from POS Mode

The system may be resumed from Powered-On-Suspend mode by:
- ❍ Alarm resume (month/day/hour/minute): The system will resume at the specific time.
- ❍ Modem ring: The system will resume when a modem ring is detected from the COM port.
- ❍ Any keyboard key pressed
- ❍ Depressing the power button (if configured as Suspend/Resume function under SCU)

Suspend To Disk (STD)

Suspend to Disk is a 0-volt suspend mode for system power management. STD mode saves most power than POS mode but takes longest time to return to full operation.

1.   Use your operating system's FDISK program to delete all partitions of the hard disk if any already exist on the target drive.
2.   Boot the system from the A: drive and run the 0VMAKFIL.EXE Utility to create the Suspend to Disk partition on the hard disk of a size that will accommodate **the installed DRAM (n) plus 4MB integrated video RAM**.

<p align="center">A:\>0VMAKFIL /Pn</p>

For example, if the system DRAM is 32MB, 0VMAKFIL will create a partiton size of approximately 36MB.

<p align="center">A:\>0VMAKFIL /P32</p>

Note: Rewrite the sector signatures if you need to partition the hard disk again.

<p align="center">C:\>0VMAKFIL /PW</p>

3.   Re-partition the hard disk using your operating system's FDISK program.

Resume from STD Mode

The system may be resumed from Suspend-To-Disk mode by:
   ❍   Power back on
   ❍   Alarm resume (month/day/hour/minute): The system will resume at the specified time.

Attaching Peripheral Devices

You can add a variety of external devices to your computer to expand your computing capabilities.

Attaching a Phone Line (option)

The DeskNote is equipped with a phone jack for connecting a phone line. To enable the function of a built-in modem, the users have to insert a modem card (Optional) into the socket on the mainboard and attach a phone cord to the jack.
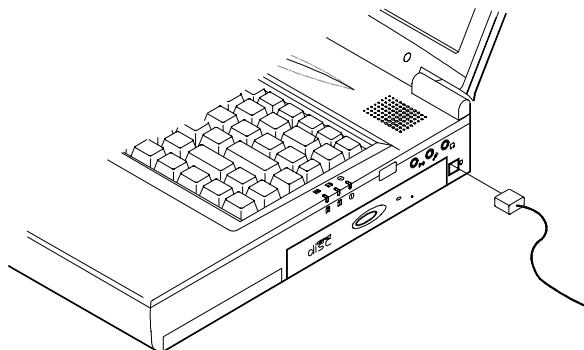
Figure 2-21

Attaching a PS/2 Keyboard or Mouse

The DeskNote can be operated with an external PS/2 keyboard or mouse. Make sure the mouse or keyboard has a cable with 6-pin connector for the PS/2 port. If not, use the transfer cable that comes with your DeskNote.
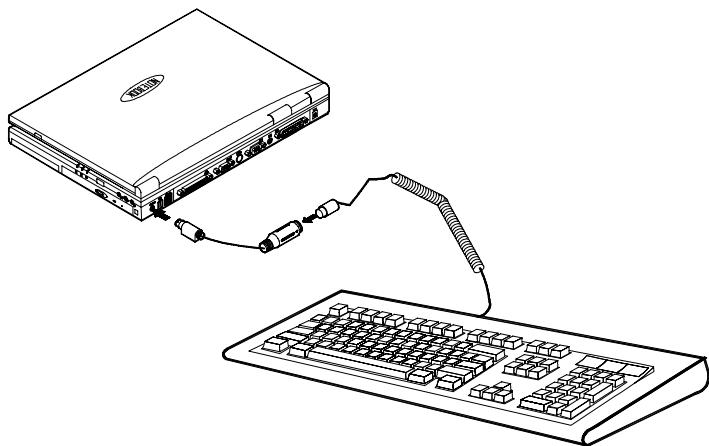
Figure 2-22

Attaching a Serial Mouse

The serial port features a 9-pin connector. You can connect any serial device such as a mouse to this port.

To connect a serial mouse, follow these steps:

1. Turn the system power off.
2. Connect the cable to the serial port on the rear panel of the DeskNote Computer.
3. Tighten the screws to fasten the cable to the serial port.
4. Turn on the DeskNote Computer.

In addition, you may need to install the manufacturer-supplied driver for the serial mouse. Refer to the device's user's guide for more information.
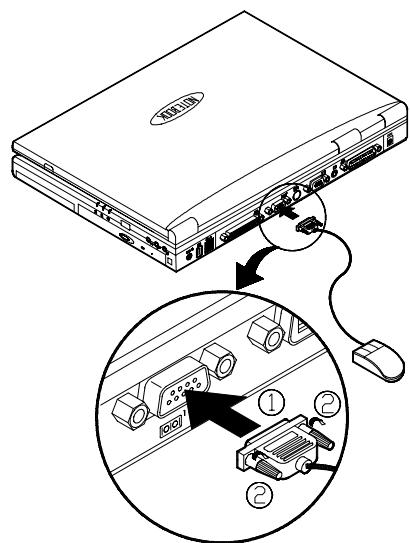
Figure 2-23

Attaching a Parallel Printer

You may connect any standard Centronics-compatible parallel printer to your DeskNote through the parallel port.

To connect a printer, follow these steps:

1. Turn the system power off.
2. Connect the cable to the parallel port on the rear of the DeskNote Computer.
3. Tighten the screws to fasten the cable to the parallel port (Figure 2-24).
4. Insert the other end of the cable to the printer's connector. Fasten the cable's connector.
5. Turn on the printer and DeskNote Computer.

In addition, you will need to install the manufacturer-supplied driver for the printer. Refer to the device's user's guide for more information. If the connected printer supports EPP (Enhanced Parallel Port) or ECP (Extended Capabilities Port) mode, please enter System Configuration Utility (SCU) to configure the required setting.
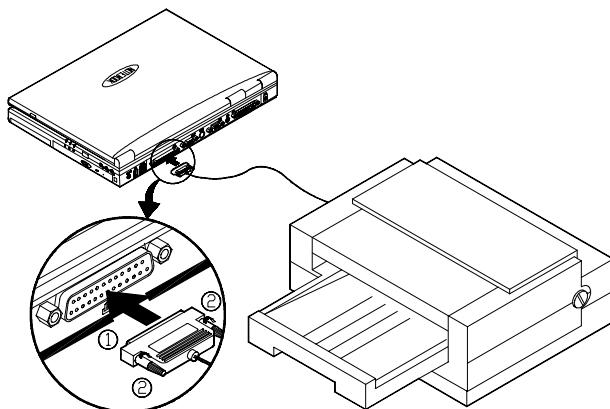
Figure 2-24

Attaching an External Monitor (CRT)

The computer is capable of displaying not only on the internal LCD, but also on an external XGA display monitor. Simultaneous display on LCD and External monitor is available. You may enter the System Configuration Utility (SCU) to select the appropriate parameters or use the **Fn** + **F6** keys (refer to *Chapter 2, Using Hot Keys*) to change the display setting.

To connect an External Monitor, follow these steps:

1.   Turn the system power off.
2.   Connect the cable to the CRT port on the rear panel of the DeskNote Computer.
3.   Tighten the screws to fasten the cable to the CRT port.
4.   Insert the other end of the cable to the external monitor.
5.   Turn on the DeskNote Computer.
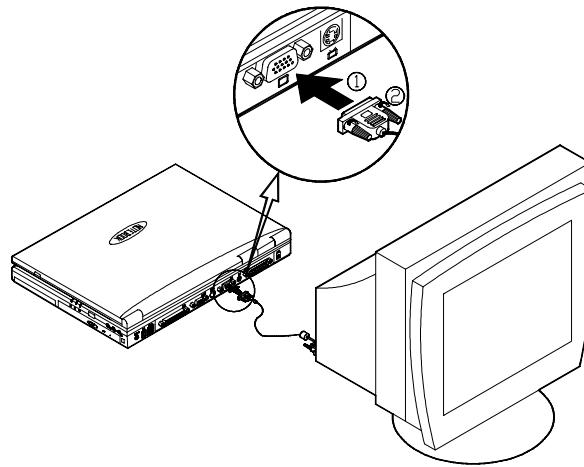
Figure 2-25

Attaching a Proprietary Port Replicator

The proprietary Port Replicator, providing interfaces for those found on the DeskNote system. It can free you from fumbling with multiple cables every time you leave the office. Please contact your dealer for detailed information.
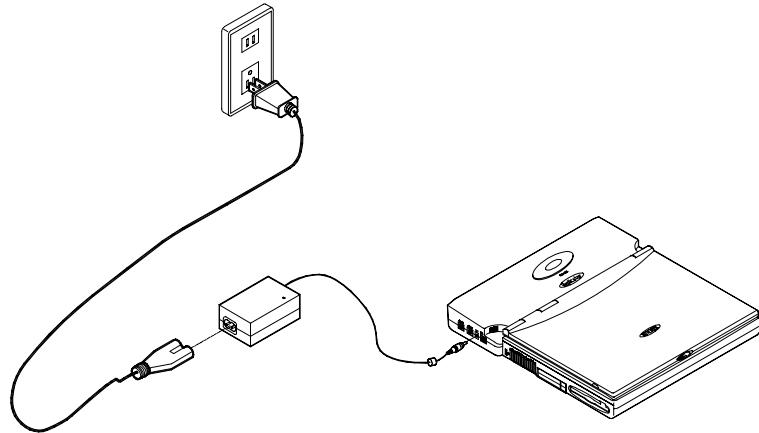
Figure 2-26

Attaching a TV Set

The S-video jack on the rear panel of the DeskNote is used for transmitting video signals to a TV set. You may need to select the video standard for video display. Enter the System Configuration Utility (SCU), Components Menu to specify the appropriate TV mode. Simultaneous display on external monitor (CRT) and TV is available. You may enter the SCU to select the appropriate parameters or use the **Fn** + **F6** keys (refer to *Chapter 2, Using Hot Keys*) to change the setting.

See figure 2-28 for information on attaching a TV set.

Note: **Different countries use different TV broadcast standards. A TV set must comply with the appropriate standard to properly receive broadcast signals. You should refer to your TV user guide to make sure which TV standard you are using.**
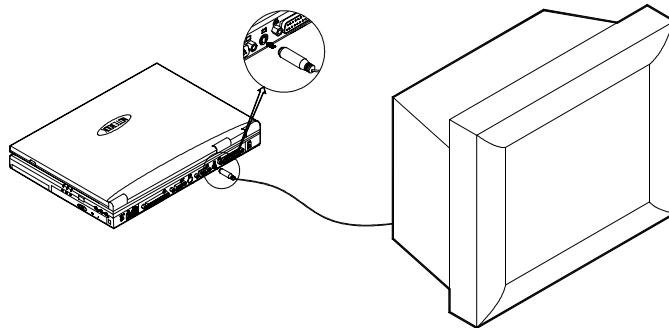
Figure 2-28

Attaching a USB-compatible Device

The DeskNote provides a USB port for connecting an USB-compatible keyboard, mouse or other devices. See Figure 2-29 for information on connecting a serial mouse.
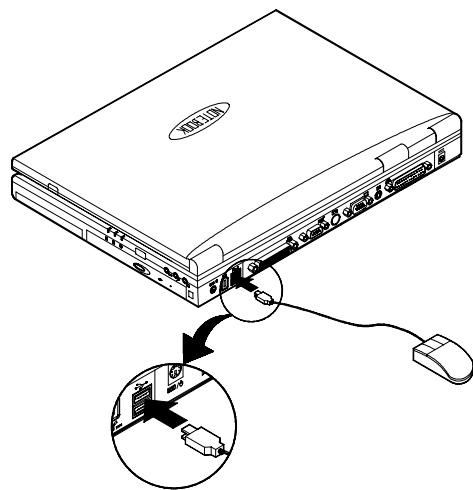
Figure 2-29

Chapter 3 : **BIOS Utilities**

This chapter provides information regarding the Power On Self Test (POST) and shows you how to use the System Configure Utility (SCU) to configure the system parameters. The settings made in BIOS SCU will affect the performance of the DeskNote.

☞ **Power On Self Test (POST)**

☞ **System Configuration Utility (SCU)**

Power On Self Test (POST)

The system BIOS (Basic Input/Output System) performs a series of Power On Self Test (POST) on system memory and key computer components every time the computer is turned on. If an error exists, the POST routine may halt execution (depending on the severity of the problem). The POST also initializes BIOS configuration then boots the operating system.

POST Message: Normal Operation

You will see the following message if no error exists after the POST is performed

Note: You may press the Spacebar key to skip the memory test.

SystemSoft BIOS MobilePRO BIOS Version 1.01 (2482-00)-(R1.00.tr02)
Copyright 1983-1996 SystemSoft Corp. All Rights Reserved

300 MHz Celeron with MMX CPU
L2 Cache: 128KB Installed
4 MB Video RAM
SystemSoft Plug-n-Play BIOS ver1.17.01

Base Memory   000640 Kb
Extended Memory   130048 Kb
Total Memory   131072 Kb

Auto Detecting IDE Devices[Done]
<CTRL-ALT-S> to enter System Configuration Utility

POST Message: Error Detected

If an error is detected, a WARNING message will be displayed. You should either press **F1** key to continue, or press the **Ctrl**-**Alt**-**S** keys simultaneously to enter the System Configuration Utility.

SystemSoft BIOS MobilePRO BIOS Version 1.01 (2482-00)-(R1.00.tr02)
Copyright 1983-1996 SystemSoft Corp. All Rights Reserved

300 MHz Celeron with MMX CPU
L2 Cache: 128KB Installed
4 MB Video RAM
SystemSoft Plug-n-Play BIOS ver1.17.01

Base Memory   000640 Kb
Extended Memory   130048 Kb
Total Memory   131072 Kb

WARNING – HARD DISK CONTROLLER 1 FAILURE
Auto Detecting IDE Devices[Done]

<CTRL-ALT-S> to enter System Configuration Utility
Press F1 to Continue

System Configuration Utility

The System Configuration Utility (SCU) is a ROM-based configuration utility that displays the system's configuration status and provides users with a tool to set their system parameters. The settings are stored in non-volatile battery-backed CMOS RAM which saves the information even when the power is turned off, and retains it when the system is turned back on.

Information in the System Configuration Utility

The following shows the main menu and its submenu that may be changed within the System Configuration Utility.

Menu Bar Items	Pull-down Menu Items
Startup	Date and Time, Fast Boot, Boot Device, Display, Enable Battery Low Beep, Enable LCD expand Mode, Enable Power On Beep, Enable PNP OS Support, Boot Password, SCU Password.
Memory	Cache Systems.
Disks	Diskette Drives, IDE Settings, Enable LS120/ZIP100 Drive.
Components	COM Ports, LPT Port, PS/2 Mouse Port, Microsoft IntelliMouse Support, Keyboard Numlock, Keyboard Repeat, TV Mode.
Power	Enable Power Saving, Low Power Saving, Medium Power Saving, High Power Saving, Customize, Suspend Controls, Resume Timer, Enable MODEM Ring Resume, Enable Battery Low Suspend, Advance CPU Controls.
Exit	Save and Exit, Exit (No Save), Default Settings, Restore Settings, Version Info.

Initiating the System Configuration Utility

The System Configuration Utility (SCU) will be accessed when pressing the **Ctrl**, **Alt**, and **S** keys simultaneously.

<CTRL-ALT-S> to enter System Configuration Utility

The above message only lasts seconds. If you miss it, the computer will initiate the boot process. You must reboot the system and try again within the time limit if you want to enter the System Configuration Utility.

```
SystemSoft SCU For Intel 440BX/440ZX chipset        Mar  2, 1999   5:48:24 pm
 Startup  Memory  Disks  Components  Power  Exit
  ┌─ Devices ─────────────────────────────────┐  ┌─ System ──────────────┐
  │                                            │  │                       │
  │  Floppy Drive A  = 1.44 Mb                 │  │  CPU Clock   = 300 MHz │
  │  Hard Drive C    = 4100 MB                 │  │                       │
  │  Hard Drive D    = 0 MB                    │  └───────────────────────┘
  │  Hard Drive E    = 0 MB                    │
  │  Hard Drive F    = 0 MB                    │
  │  Serial Port 1   = COM 1, 3F8, IRQ 4       │  ┌─ Memory ──────────────┐
  │  Serial Port 2   = COM 2, 2F8, IRQ 3       │  │                       │
  │  Parallel Port   = LPT1, Addr 378, IRQ 7   │  │  Base      =    640 KB │
  │                                            │  │  Extended  =130048 KB │
  │                                            │  │  Shadow    =     64 KB │
  │                                            │  │  Reserved  =    320 KB │
  │                                            │  │  Total RAM =131072 KB │
  │                                            │  │  Cache (Ext) =  128 KB │
  └────────────────────────────────────────────┘  └───────────────────────┘

 Press <Alt> key to activate menus, and cursor keys to navigate. Mouse left
 button, spacebar, and <Enter> keys accept menu item. Mouse right button and
 <Esc> key cancel current action.
```

Figure 3-1
System Configuration Utility (SCU)

Working with the Menu Bar (Main Menu)

After entering the SCU, you may use the following keys to work with the menu bar (main menu).

Action	Keys Used	Description
Activate menus	Alt	Activate the System Configuration Utility.
Select menu bar item	Left arrow (←) Right arrow (→)	Move to a menu bar item on the left. Move to a menu bar item on the right.
	The highlighted letter key	Move to the corresponding menu bar item.
Accept menu item	Mouse left button Spacebar Enter	Enter the selected menu bar item to configure settings.
Cancel current action	Mouse right button Esc	Undo the current command.

Working with the Pull-down Menu (Submenu)

When the desired menu bar (main menu) item is highlighted, press the **Enter** key to enter the pull-down menu (submenu) for values setting. You may use the following keys to work with the pull-down menu.

Action	Keys Used	Description
Select pull-down menu item	Down arrow (↓)	Move to the next pull-down menu item.
	Up arrow (↑)	Move to the previous pull-down menu item.
	The highlighted letter key	Move to the corresponding pull-down menu item.
Select a control	Tab	Move between the options.
Change values	Down/Up arrows (↓)(↑)	Modify the settings.
Accept entries	Spacebar	Enable/disable the specified function. When a check mark (√) appears, the function is on.
	Enter	Choose <OK> from a list of options.
Reject entries	Esc	Undo the current setting.
	Enter	Choose <Cancel> from a list of options.
Activate accelerators	Alt	Initiate all the highlighted letters corresponding to their respective options.
Quit	Esc	Press the Esc key to close the pull-down menu.

Features of the System Configuration Utility

Startup Menu

Item	Setting/Option		Function
Date and Time	Day/Month/Year Hour/Minute/Second		Set the current date and time.
Fast Boot	Enable		Initialize and quickly boot the system in a few seconds by skipping certain diagnostic tests.
	Disable		Disable the above.
Boot Device	1st Boot device	Hard Disk C	Select one of these drives as 1st choice for the BIOS for booting the system.
		CD-ROM Drive	
		Diskette A	
	2nd Boot Device	Hard Disk C	Select one of these drives as 2nd choice for the BIOS for booting the system.
		CD-ROM Drive	
		Diskette A	
	3rd Boot Device	Hard Disk C	Select one of these drives as 3rd choice for the BIOS for booting the system.
		CD-ROM Drive	
		Diskette A	
Display	LCD		Activate the system's LCD panel.
	CRT		Activate an external monitor
	LCD+CRT		Activate both the LCD and the CRT.
	TV		Activate an external TV.
	LCD+TV		Activate both the LCD and the TV.
	CRT+TV		Activate both the CRT and the TV.
	LCD+CRT+TV		Activate all the LCD, CRT and the TV.
Enable Battery Low Beep	Enable		The system emits a series of warning beeps sound when the battery power becomes low.
	Disable		Disable the above.
Enable LCD Expand Mode	Enable		Stretch the display to fill the entire viewing area of the LCD panel.
	Disable		Disable the above.

Item	Setting/Option	Function
Enable PNP OS Support	Enable	Enable or disable PNP OS Support.
	Disable	
Enable power on Beep	Enable	The system emits a beep sound when the system power is on.
	Disable	Disable the above.
Boot Password	Enter old Power-On Password	Set password for booting computer. Users are authorized to start the system after entering correct password.
	Enter new Power-On Password	
	Verify new Power-On Password	
	Enable Password to Power-On	
SCU Password	Enter old Setup Password	Set password for modifying SCU. Users are authorized to change the SCU setting after entering correct password.
	Enter new Setup Password	
	Verify new Setup Password	
	Enable Setup Password	
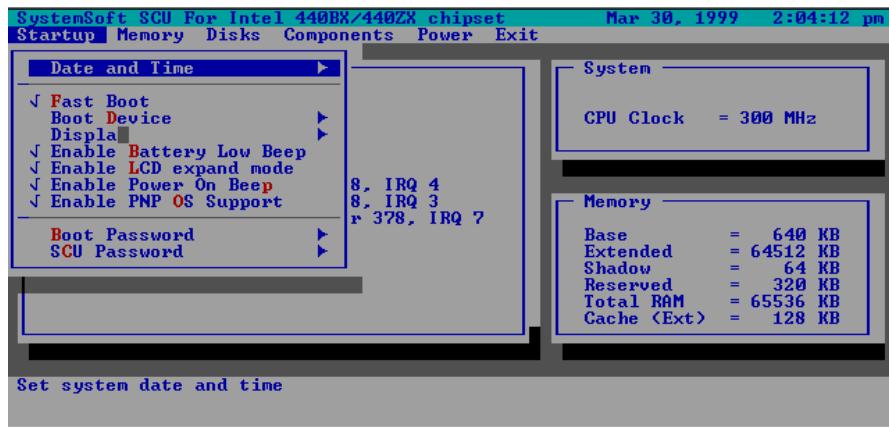
Figure 3-2 Startup Menu

Memory Menu

Item	Setting/Option		Function
Cache Systems	L1 Cache	Disabled	Disable the processor's internal cache.
		Write Back	Enable the write-back policy for L1 memory to access only when necessary to update the cache contents with changes for faster performance.
	L2 Cache	Disabled	Disable the L2 cache controller.
		Write Back	Enable the write-back policy for L2 memory to access only when necessary to update the cache contents with changes for faster performance.
	BIOS Shadow	Cached	The process of *shadowing* copies instructions from system BIOS into RAM to improve system performance.
		Not Cached	Disable the above.
	Video Shadow	Cached	The process of *shadowing* copies instructions from video BIOS into RAM to improve system performance.
		Not Cached	Disable the above.

```
SystemSoft SCU For Intel  440BX/440ZX chipset          Mar  2, 1999   5:51:37 pm
Startup  Memory  Disks  Components  Power  Exit

  ┌ Devic┌──── Cache Systems ▶ ──────────┐          ┌ System ───────────┐
  │      │                              │          │                    │
  │  Floppy Drive A  = 1.44 Mb          │          │  CPU Clock   = 300 MHz │
  │  Hard Drive C   = 4100 MB           │          │                    │
  │  Hard Drive D   = 0 MB              │          └────────────────────┘
  │  Hard Drive E   = 0 MB              │
  │  Hard Drive F   = 0 MB              │          ┌ Memory ───────────┐
  │  Serial Port 1  = COM 1, 3F8, IRQ 4 │          │                    │
  │  Serial Port 2  = COM 2, 2F8, IRQ 3 │          │  Base       =   640 KB │
  │  Parallel Port  = LPT1, Addr 378, IRQ 7 │       │  Extended   =130048 KB │
  │                                     │          │  Shadow     =    64 KB │
  │                                     │          │  Reserved   =   320 KB │
  │                                     │          │  Total RAM  =131072 KB │
  │                                     │          │  Cache (Ext) =  128 KB │
  └─────────────────────────────────────┘          └────────────────────┘

  Internal and External cache settings
```

Figure 3-3 Memory Menu

Disks Menu

Item	Setting/Option		Function
Enable LS120/ ZIP100 Drive	Enable		Enable or disable LS120 /IOMEGA ZIP 100 support.
	Disable		
Diskette Drives	Drive A	None	Configure diskette drives A and B.
		1.44 MB	
		2.88 MB	
IDE Settings	Primary HDD	Drive Enabled	Enable enhanced IDE settings. ZIP device does not Support for this model.
		PIO Mode	
	CD-ROM/DVD-ROM	Drive Enabled	
		PIO Mode	
	LS120/ZIP/2nd HDD	Drive Enabled	
		PIO Mode	

```
SystemSoft SCU For Intel 440BX/440ZX chipset        Mar  2, 1999   5:52:33 pm
Startup  Memory  Disks  Components  Power  Exit

  ┌─ Devices ─────┬─────────────────────────────┬─ System ─────
  │               │ _ Enable LS120/ZIP100 Drive │
  │ Floppy Drive  │   Diskette Drives         ▶ │
  │ Hard Drive C  │                             │ CPU Clock   = 300 MHz
  │ Hard Drive D  │   IDE Settings            ▶ │
  │ Hard Drive E  │ = 0 MB                      │
  │ Hard Drive F  │ = 0 MB                      │
  │ Serial Port 1 │ = COM 1, 3F8, IRQ 4         ├─ Memory ─────
  │ Serial Port 2 │ = COM 2, 2F8, IRQ 3         │
  │ Parallel Port │ = LPT1, Addr 378, IRQ 7     │ Base       =    640 KB
  │               │                             │ Extended   =130048 KB
  │               │                             │ Shadow     =     64 KB
  │               │                             │ Reserved   =    320 KB
  │               │                             │ Total RAM  =131072 KB
  │               │                             │ Cache (Ext)=    128 KB

  When selected, system will support LS-120 / IOMEGA ZIP 100
```

Figure 3-4 Disks Menu

Components Menu

Item	Setting/Option		Function
COM Ports	COM A I/O Settings	None	Specify the COM A configuration. (COM3 & COM4 only for DOS mode & Non-PnP OS)
		COM1, 3F8, IRQ4	
		COM2, 2F8, IRQ3	
		COM3, 3E8, IRQ10	
		COM4, 2E8, IRQ11	
	COM B I/O Settings	None	Specify the COM B configuration. (COM3 & COM4 only for DOS mode & Non-PnP OS)
		COM1, 3F8, IRQ4	
		COM2, 2F8, IRQ3	
		COM3, 3E8, IRQ10	
		COM4, 2E8, IRQ11	
	Mode Setting For COM B	Normal (16550)	Define the COM B hardware.
		IrDA (HPSIR)	
		ASK IR	
		FAST IR	
	DMA Setting For Fast IR	DMA 0	Set the DMA channel for the Infrared port if FIR mode is used.
		DMA 1	
		DMA 3	
LPT Port	Port Address	None	Select parallel (printer) port I/O address and IRQ assignment.
		LPT1, Addr 378, IRQ7	
		LPT2, Addr 278, IRQ5	
		LPT3, Addr 3BC, IRQ7	
	Port Definition	Standard AT (Centronics)	
		Bidirectional (PS-2)	
		Enhanced Parallel (EPP)	
		Extended Capabilities (ECP)	
	DMA Setting For ECP Mode	DMA 1	Set the DMA channel for the parallel port if the ECP mode is used.
		DMA 3	
	EPP Type	EPP 1.7	Set the current type for EPP.
		EPP 1.9	

Item	Setting/Option		Function
PS/2 Mouse Port	Enable		Enable Onboard PS/2 Mouse Port.
	Disable		Disable the PS/2 mouse if IRQ resource is not enough.
Microsoft Intellimouse Support	Enable		Support PS/2 mouse with the wheel button.
	Disable		Do not support PS/2 mouse with the wheel button.
Keyboard Numlock	Enable		Specify whether Num Lock is on or off at system boot time.
	Disable		
Keyboard Repeat	Key Repeat Rate	2 cps	Define the rate (characters per second) at which the keyboard repeats while a key is depressed.
		6 cps	
		10 cps	
		15 cps	
		20 cps	
		30 cps	
	Key Delay	¼ sec	The repeat key feature will be delayed by the selected time value.
		½ sec	
		¾ sec	
		1 sec	
TV Mode	TV Modes Selection	NTSC	Specify the TV mode as NTSC, PAL.
		PAL	

```
SystemSoft SCU For Intel  440BX/440ZX chipset          Mar  2, 1999   5:53:24 pm
 Startup  Memory  Disks  Components  Power  Exit
┌─ Devices ──────────────────────────────────────────┐
│                      COM Ports                    ►
│  Floppy Drive A   = 1.                              = 300 MHz
│  Hard Drive C     = 41   LPT Port                 ►
│  Hard Drive D     = 0
│  Hard Drive E     = 0   √ PS/2 Mouse Port
│  Hard Drive F     = 0   _ Microsoft IntelliMouse Support
│  Serial Port 1    = CO
│  Serial Port 2    = CO  √ Keyboard Numlock
│  Parallel Port    = LP    Keyboard Repeat         ►
│                                                       =    640 KB
│                           TV Mode                    =130048 KB
│                                                       =     64 KB
│                                           Reserved   =    320 KB
│                                           Total RAM  =131072 KB
│                                           Cache (Ext) =  128 KB

 Configure serial (COM) port I/O addresses
```

Figure 3-5 Components Menu

Power Menu

Item	Setting/Option		Function
Enable Power Saving	Enable		Enable/Disable all power saving features.
	Disable		
Low Power Saving	Enable		Enable/Disable the power saving to its lowest settings which results in max performance but shortest battery life.
	Disable		
Medium Power Saving	Enable		Enable/Disable the power saving to its medium settings which results in both moderate performance and battery life.
	Disable		
High Power Saving	Enable		Enable/Disable the power saving to its highest setting which results in min. performance but longest battery life.
	Disable		
Customize	Disk Standby	Always on	The hard disk will be powered down if it is not accessed within the specified period. Hard disk power will be restored when the disk drive is accessed again.
		5 sec	
		10 sec	
		15 sec	
		20 sec	
		30 sec	
	Global Standby	Always on	The system power will be reduced if the system has been idle for the specified period. System power will be restored when any system activity is detected.
		1 min	
		2 min	
		4 min	
		6 min	
		8 min	
		12 min	
		16 min	

Item	Setting/Option		Function
Suspend Controls	Power Button Function	Power On/Off	The power button is switched to turn the system on or off.
		Suspend/Resume	The power button acts as a **suspend/resume button** for switching the system between a working state and the suspend mode.
			Pressing the power button for more than four seconds will generate a **power button over-ride event** to switch the system from a working state to the Soft-Off state.
	Suspend Type	Suspend To Disk	Specify the type of hardware suspend mode for power management.
		Suspend To RAM	
		Powered On Suspend	
	Suspend Timeout	Never	If the system has been idle for the specified period, the system will enter user-defined suspend.
		1 min	
		5 min	
		10 min	
		20 min	
		30 min	
Resume Timer	Alarm Resume	Enable	Resume the system from the configured suspend mode when resume alarm timer expires.
		Disable	
	Resume Month/Day/Hour/Minute		The system will resume at the specified time (month, day, hour and minute).

Item	Setting/Option		Function
Enable MODEM Ring Resume	Enable		Resume the system from suspend mode when a modem ring is detected.
	Disable		Disable the above.
Enable Battery Low Suspend	Enable		Enable suspend to disk on a low battery condition.
	Disable		Disable the above.
Advance CPU Controls	Clock Control Mechanism	Full Speed	Specify the type of Processor Clock Control.
		Doze Mode	

```
SystemSoft SCU For Intel 440BX/440ZX chipset          Mar  2, 1999   5:54:22 pm
Startup  Memory  Disks  Components  Power  Exit
┌─ Devices ──────────────────────────────┐ √ Enable Power Saving ────────────
│                                         │
│  Floppy Drive A  = 1.44 Mb              │ _ Low    Power Saving
│  Hard Drive C    = 4100 MB              │ _ Medium Power Saving        MHz
│  Hard Drive D    = 0 MB                 │ _ High   Power Saving
│  Hard Drive E    = 0 MB                 │ √ Customize               ►
│  Hard Drive F    = 0 MB                 │
│  Serial Port 1   = COM 1, 3F8, IR       │   Suspend Controls       ►
│  Serial Port 2   = COM 2, 2F8, IR       │
│  Parallel Port   = LPT1, Addr 378       │   Resume Timer           ►
│                                         │ _ Enable MODEM Ring Resume    40 KB
│                                         │ _ Enable Battery Low Suspend  48 KB
│                                         │                               64 KB
│                                         │   Advance CPU Controls   ►    20 KB
│                                         │                               72 KB
│                                         │         Cache (Ext)  =   128 KB
│
│ Enable all power saving features
```

Figure 3-6 Power Menu

Exit Menu

Item	Function
Save and Exit	Save the current settings and reboot the system.
Exit (No Save)	Exit without saving any current changes.
Default Settings	Set the current setup to default settings (the original ones found in ROM).
Restore Settings	Restore the current setup settings to the original custom ones.
Version Info	Show current BIOS version information.

```
SystemSoft SCU For Intel 440BX/440ZX chipset      Mar  2, 1999   5:55:23 pm
Startup  Memory  Disks  Components  Power  Exit
 ┌ Devices ──────────────────────────────┐ Save and Exit    ▶
 │                                        │ Exit (No Save)   ▶
 │ Floppy Drive A  = 1.44 Mb              │                      
 │ Hard Drive C    = 4100 MB              │ Default Settings ▶  00 MHz
 │ Hard Drive D    = 0 MB                 │ Restore Settings ▶
 │ Hard Drive E    = 0 MB                 │
 │ Hard Drive F    = 0 MB                 │ Version Info     ▶
 │ Serial Port 1   = COM 1, 3F8, IRQ 4    │
 │ Serial Port 2   = COM 2, 2F8, IRQ 3    │ ┌ Memory ────────────────┐
 │ Parallel Port   = LPT1, Addr 378, IRQ 7│ │
 │                                        │ │ Base       =     640 KB
 │                                        │ │ Extended   =130048 KB
 │                                        │ │ Shadow     =      64 KB
 │                                        │ │ Reserved   =     320 KB
 │                                        │ │ Total RAM  =131072 KB
 │                                        │ │ Cache (Ext) =    128 KB
 └────────────────────────────────────────┘ └────────────────────────┘
Save current settings and return to previous work
```

Figure 3-7 Exit Menu

Chapter 4 : Troubleshooting

Sometimes your computer has some problems. Before you consult the computer vendor, you can try to solve problems yourself. This chapter provides you with a list of some commonly experienced problems and their possible solutions.

☞ **Battery**
☞ **Power**
☞ **Hard Disk Drive**
☞ **Floppy Disk Drive**
☞ **Hardware Installation**
☞ **LCD Panel**
☞ **Memory Module**
☞ **PC Card**
☞ **Boot Password**
☞ **Audio**
☞ **CD**
☞ **Printer**

Battery

Problem: The battery pack can not be charged.
Solution 1 : The battery pack is exposed to excessively hot and cold
environment. Let it restore to normal condition before you use it.
Solution 2 : The power might be used up.
*Problem: The battery pack can not be charged and the charge
indicator turns off.*
Solution 1 : The battery has been fully charged.
Solution 2 : The battery pack is exposed to excessively hot or cold
environment. Let it restore to normal condition before you use it.
Solution 3 : The battery pack is used up.
*Problem: The beep sound is heard and the low-battery indicator
turns on.*
Solution : The computer is in low-battery status. Please connect your computer with AC
adapter, or press Fn + Esc key combination to enter suspend mode.
*Problem: The beep sound isn't heard whereas the low-battery
indicator turns on, or the gauge indicates power is less than
10%.*
Solution : The computer is in low battery status. Please adjust the volume control and
connect the computer with AC adapter.
Problem: The actual battery operation time is shorter than expected.
Solution 1 : The battery is exposed to excessively high or low temperature. The ideal
temperature for battery operation is between 50°F and 95°F (10°C and 35°C)
whereas keeping is between 32°F and 113°F (0°C and 45°C).
Solution 2 : The battery has released some power. Please recharge it.
Solution 3 : The power management has been turned off.
Solution 4 : Some peripheral device or PC card is consuming power. Turn
off the unused device to save power.
Solution 5 : The battery has been given a partial charge. When charging,
always fully charge after fully discharge.
*Problem: When the battery is being charged and the temperature is
over the degree 60 , the LED indicators will show
blinking green.*
Solution 1: Take the battery out for a while . After the heat cooling down,
recharge the battery again.
Solution 2: Turn off the DeskNote. When the computer cools down, turn
on the DeskNote computer again to recharge the battery.

Power

Problem: *The computer can not boot when the battery pack is not
inserted.*
Solution 1 : The power cord is not correctly connected with AC adapter.
Make sure the power cord is firmly plugged into grounded
outlet and computer.
Solution 2 : The grounded outlet is not in normal operation. Check the
outlet's function or use other outlet.

Problem: ***The system has automatically entered suspend mode***.
Solution 1 *:* The system's temperature is too high. Let it cool before you
use it.
Solution 2 *:* The system has entered suspend mode after a specified period of time. Please
press any key or touch the trackpad to wake up the computer.

Hard Disk Drive

Problem: ***The message "Nonsystem disk" appears.***
Solution : The computer is trying to boot from the floppy including no
software. Please take the floppy out and restart the computer.
Problem: ***It needs a longer time to read the hard disk drive after***
restarting the computer.
Solution 1 : The data saved on hard disk drive may be lost. Please operate the
"disk defragmenter" to check the lost unit.
Solution 2 : As in low battery status, the computer is waking up from the suspend
mode.

Floppy Disk Drive

Problem: The floppy disk drive can not write data to disk.
Solution 1 : The floppy is not formatted.
Solution 2 : The floppy is write-protected. Please cancel the protection.
Solution 3 : The data is written to incorrect disk drive.
Solution 4 : The space left on disk is not enough. Please use a new disk or delete
the unneeded data.
Problem: The disk drive can not read the disk.
Solution 1 : The disk is not formatted.
Solution 2 : The disk is damaged.
Solution 3 : An incorrect disk type is used.

Hardware Installation

Problem: The computer can not recognize the device as part of the
system.
Solution 1 : The power switch of new dev ice is not turned on. Please turn on the
power switch, then restart the computer.
Solution 2 : You do not rearrange the com puter after the device is installed.
Solution 3 : The power cord or the connec tor between device and computer is
plugged out. Please make sure the device is firmly connected with the
computer.
Solution 4 : You do not follow the system configuration as the computer
suggested. Please follow the suggestion.

LCD Panel

Problem: The font is too dark.
Solution : The brightness or contrast is n ot correctly set. Please press Fn+F7 or
Fn+F8 key combination (only limited to DSTN panel) to adjust the
contrast control, and use Fn+F9 or Fn+F10 to adjust the brightness
control.
Problem: The screen is blank.
Solution 1 : The panel blank application m ight be set.
Solution 2 : The system operates the s creen saver after a specified period
of time. Please press any key or touch the trackpad.
Solution 3 : The brightness or contrast nee ds to be adjusted. Please press Fn+F7
or Fn+F8 key combination (only limited to DSTN panel) to adjust the
contrast control, and use Fn+F9 or Fn+F10 to adjust the brightness
control.
Solution 4 : The system has entered suspe nd mode. Please press any key or touch
the trackpad to wake up the computer.
Problem: The LCD panel displays incorrect font or blinks when the
computer is connected with an external monitor.
Solution : The resolution you use for the monitor exceeds that the LCD panel can
support whereas you have switched to the LCD panel. Please restart
the computer.

Memory Module

Problem: The computer can not boot.
Solution *:* The incorrect type of memory module is installed.
Problem: The memory capacity is not enough.

Solution *:* The memory is not correctly c onfigured for the application.

*Problem: **The detected memory capacity is not correct.***

Solution : Some memory module is not correctly installed or not compatible with your computer.

*Problem: **The message "out of memory" is displayed.***

Solution : The memory configuration is not correctly set or the memory is not enough to run the application.

*Problem: **The message "insufficient memory" is displayed.***

Solution : The application can not be op erated as the memory is used up.

PC Card

Problem: The PC card can not be configured.
Solution : The PC card is not supported.
Problem: The system can not recognize the PC card.
Solution 1 : The PC card is not completely inserted into the socket or inserted in reverse.
Solution 2 : The PC card driver is not installed.
Solution 3 : The PC card or card driver is not compatible with the computer.
Problem: The beep sound is not heard while the PC card is inserted into.
Solution : The beep sound control is closed.

Boot Password

Problem: You forget the boot password.
Solution : While forgetting the password, you must unpack the computer and delete the memory. Please ask the vendor for help.

Audio

Problem: The audio speaker can not be heard.
Solution : The volume might be set too low. Please check your volume control.

Problem: The volume is too high (or too low).
Solution : The volume is not correctly se t. Please check your volume control.
Problem: The headphone can not be heard.
Solution 1 : The volume is not correctly se t. Please check the volume control.
Solution 2 : The volume source is not cho sen.
Solution 3 : The headphone is plugged int o the wrong jack.

CD

Problem: The compact disk can not be exited.
Solution : The compact disk is not corre ctly placed in the tray.
Problem: The compact disk can not be read.
Solution 1 : The compact disk is not corre ctly placed in the tray.
Solution 2 : The compact disk is dirty. Ple ase clean it with a CD-ROM cleaner kit.
Problem: The musical compact disk can be read while the data disk can not.
Solution : The compact disk hardware fo r reading data needs to be checked.
Problem: All compact disks can not be read.
Solution 1 : The Windows system can not recognize the CD-ROM drive or the CD-ROM drive is not compatible with other devices.
Solution 2 : The compact disk is dirty. Ple ase clean it with a CD-ROM cleaner kit.
Solution 3 : The compact disk hardware fo r reading data needs to be checked.

Printer

Problem: The printer can not be set up.
Solution : The printer power cord is not plugged into or the connector is not correctly connected.
Problem: The printer can not work.
Solution 1 : The printer is not powered on . Please turn on the printer.
Solution 2 : The printer is not in "connecte d" status. Please set the printer in "connected" status.
Solution 3 : The printer paper is used up. Pl ease add the paper.
Solution 4 : The printer driver is not instal led or correctly chosen. Please check the system.
Solution 5 : The printer for network is not connected with the network.
Problem: The printer prints incorrect data.
Solution 1 : The printer driver is not instal led or correctly chosen.
Solution 2 : The printer power cord is not plugged into or the connector is not correctly connected.

ATI DVD Play Station (Option)

*Problem: When the DVD station is playing, pressing any (Fn) Hot
      keys quickly at the same time, the DVD station will stop
      running in the normal Windows system.*

Solution: Please avoid pressing the Hot key quickly and continuously. For
      example, when use the Fn key to control the voice volume, press
      the Fn
      key, stopping seconds each time before pressing again. Or go to
      Windows 95/98, click the icon of volume at the right-bottom corner
      to control the voice volume.

Chapter 5 : Installing Drivers

This chapter provides users the step-by-step instructions of installing device drivers and utilities. This chapter is designed for DeskNote beginners as well as advanced users. Please follow the steps and suggestions below to start a new DeskNote computer work.

Use the CD for drivers in the Package; prepare a DOS startup disk and DOS files before installing drivers for the first.

For more details and operating help, please contact your service dealer.

☞ **Installing Windows 95**

☞ **Installing Windows 98**

☞ **Drivers for Windows 95**

☞ **Drivers for Windows NT4.0**

☞ **Drivers for Windows 98**

Preparation

Preparation for a new DeskNote:

1. Use a DOS startup disk to start the DeskNote Computer.

2. Run FDISK utility from DOS to create a bootable partition.

    After A: prompt, type fdisk. (A: fdisk) Choose "1" to create

    hard disk as drive C:

    (See DOS manual for the operation detail.)

3. Format hard disk. Follow the command "Format C:/S" to create

    a bootable hard disk and a bootable floppy disk. (A: format C)

    (C:/S copies system files to the formatted disk)

4. Copy the file [MSCDEX.EXE] from DOS disk to drive C:

5. Insert the disk of the CD-ROM driver. Type "Install" after A

    prompt (A: install) See the driver manual for detail.

6. Restart the system

Installing Windows 95 (For Reference)

1. Start DOS.
2. Insert the Windows 95 CD-ROM.
3. Go to the "setup" directory
4. After the directory prompt, type "setup", then press [Enter].

5.   After the Windows 95 setup program performs a routine check on your system, press [enter] to continue.
6.   When the "Welcome to Windows 95 Setup" screen appears, click "Continue".
7.   Click "Yes" on the "License Agreement" screen.
8.   Click "Next" to select "Collecting Information about your computer".
9.   Click "Next" to select the default of "C:\WINDOWS", or enter a different directory.
10.   On the screen of "Setup Options", select "Portable", then click "Next".
11.   On the screen of "Certificate of Authenticity", enter the Product Identification Number, then click "Next".
12.   On the screen of "User Information", enter your name and company, then click "Next".
13.   Analyzing your computer, click "Next".
14.   Select "Install the most common components (recommended)", then click "Next".
15.   On the screen of "Startup Disk", insert a blank diskette into drive A to create a startup diskette.
16.   The Setup Wizard is now copying files. After the copying is finished, remove the disk, then click "OK".
17.   Click "Next" to start copying Windows 95 files to your computer.
18.   Click "Finish" to restart Windows 95.
19.   On the screen of "Set Up a Printer", click "Cancel".

Note: *Do not install a printer at this time. You will not be able to access the Windows 95 Installation CD until you reboot.*

20.   Click "OK" to restart the computer.

Installing Windows 98 (For reference)

1. Start DOS.
2. Insert the Windows 98 CD-ROM.
3. Go to the "setup" directory, type "setup", then press [Enter].
4. Follow the instructions on the screen and choose the recommended option.
5. The Windows 98 setup program will check the hard disk drive automatically.
6. When the setup initializes, click "Continue".
7. Choose "License Agreement" to agree the Contract.
8. Click "Next" to type the product ID number.
9. Click "Next". The program will automatically check the system.
10. Choose the directory for your computer. Select the path of "C:\Windows", or type another path.
11. For reinstallation, choose "Yes" (recommended) to keep the files.
12. Select your location.
13. To create a Win98 Startup disk, insert a floppy disk into drive A. To create the startup disk later, choose "Cancel".
14. Press "Next". The program will copy files to your computer's hard disk.
15. At the same time, the screen will show the Win98 concerned information and the setup items one by one.
16. After the automotive setup stops, restart the computer.

Installing Drivers in Windows 95

Step 1: Run USB supplement path update file
❍   After finishing Win95 ORS2.1 installation, go to Win95
❍   Download the file <USB supplement path update file> from Microsoft Web Site to run the USB supplement path.

Step 2: Installing TXPATCH Driver

❍   Open the driver "[TXPATCH] Intel 82371xb.inf TX" from the path of CD-ROM Drive.
❍   Run "setup.exe".
❍   Follow the instruction to finish the installation.
❍   Restart the system.

Step 3: Installing VGA Driver

Preparation:
Before ATI VGA installation, firstly insert the CD; click the directory [Directx].
Choose [Dxsetup]→[Reinstall Directx] and press [OK]. The program will automatically restart the system. The DirectX 6.0 will be already installed in your software.

❍   Click "Start".
❍   Select "Run".
❍   Open the path "D:\Video\WIN9X.
❍   Run "setup.exe" to finish installation.

Note:
When ATI VGA driver has existed in the system, click "Start", select "Run", open the path "atiuinst-clean", and then double-click "OK" to uninstall the original VGA drivers and then update the VGA drivers.

Step 4: Installing Audio Driver

❍   Click "Start".
❍   Select "Settings".
❍   Click "Control Panel"/"System"/"Device Manager".

❍ Select "Other devices".
❍ Remove "Unknown Device".
❍ Click "OK", then restart the system.
❍ After entering into WIN95 system, the program will automatically go to the "Add New Hardware Wizard" (PCI Multimedia Audio Device).
❍ Click "Next"/"Other Locations".
❍ Click "Browse" to locate the audio driver from the CD-ROM. (The path is :\Audio\WIN95.)
❍ Click "Ok".
❍ Click "Finish" to set up the first audio driver.

Step 5: Installing PCMCIA driver

❍ Click "Start".
❍ Select "Settings".
❍ Click "Control Panel"/"System"/"Device Manager".
❍ Select "Other Devices".
❍ Remove "PCI CardBus Bridge", and then click "OK".
❍ Open "Control Panel".
❍ Select "Add New Hardware".
❍ Click "Add PCMCIA socket".
❍ Locate the file "pcmcia.inf" from the disk or CD-ROM.
❍ Select "PCI-1225 CardBus" from "Texas Instruments".
❍ Click 'Next"/"Next"/"Finish".
❍ Before restarting the system, copy the file "PCMCIA.inf" to
   "C:\windows\inf", and the file [pci.vxd] [pccard.vxd] [cbss.vxd] to
   [C:\windows\system].

Note: make sure whether the files are copied to drive C successfully.
[C:\windows\system\cbss.vxd] [C:\windows\system\pccard.vxd]
[C:\windows\system\pci.vxd] [C:\windows\inf\pcmcia.inf]

Step 6: Installing ATI DVD Play (Option) Driver

Note:
Firstly make sure that it has already successfully installed the VGA drivers, Audio Driver and DirectX5/DirectX6.

❍ Boot the system; press Ctrl+Alt+S to enter SCU system. Select [Power]. Enable [Low Power Saving], or Select [Advance CPU control] to set [Full Speed]. (If the clock of Intel Pentium II is above 366MHz/400MHz or if your DVD runs smoothly, you can skip the step).

❍ In the windows system, click [Start]; select [Setting], [Control Panel], and [System]. Open [Device Manager]; select [CDROM]. Click the item including the type of [DVD-ROM], and [Setting]; then enable [DMA] in Options.

❍ Insert the CD of Ati-DVD-Play application and the program will automatically run the installation until finished. Otherwise, click [Start] in the windows system. Select [Run]. Open the path [D:\Atiplay\setup.exe]. Run [setup.exe] to finish the installation.

Step 8: Using Infrared Wireless Communication
❍ Please refer to the readme file under the FIR directory.

Installing Drivers in Windows 98

Step 1: Installing VGA Driver

Preparation:
Before ATI VGA installation, firstly insert the CD; click the directory [Directx].
Choose [Dxsetup]→[Reinstall Directx] and press [OK]. The program will
automatically restart the system. The DirectX 6.0 will be already installed in your
software.

❍ Click "Start".
❍ Select "Run".
❍ Open the path "D:\Video\WIN9X.
❍ Run "setup.exe" to finish installation.

Note:
When ATI VGA driver has existed in the system, click "Start", select "Run", open
the path "atiuinst-clean", and then double-click "OK" to uninstall the original VGA
drivers and then update the VGA drivers.

Step 2: Installing Audio Driver

❍ Click "Start".
❍ Select "Settings".
❍ Click "Control Panel".
❍ Select "system".
❍ Click "Device Manager".
❍ Select "Other Devices".
❍ Remove "PCI Multimedia Audio Device".
❍ Click "OK", then restart the system.
❍ After entering into WIN98 system. The program will automatically go to the
    "Add New Hardware Wizard". Choose [PCI Multimedia Audio Device].
❍ Click "Next".
❍ Click "Browse" to specify the location.
❍ Open the path "D:\audio\Win95".
❍ Click "Next", and then click "Finish" to set up the first audio driver.

Step 3: Installing PCMCIA Driver

❍ Click "Start"/"Settings"/"Control Panel"/"System".
❍ Remove PCMCIA.
❍ Delete the two sub-directories [Generic CardBus Controller].
❍ Switch to DOS. Copy the file [PCMCIA.inf] to the directory [C:\windows\inf].
❍ Restart Win98 system.

Step 4: Installing ATI DVD Play (Option) Driver

> *Note:*
> Firstly make sure that it has already successfully installed the VGA drivers, Audio Driver and DirectX6.

- ○ Boot the system; press Ctrl-Alt-S to enter SCU system. Select [Power]. Enable [Low Power Saving], or Select [Advance CPU control] to set [Full Speed]. (If the clock of Intel Pentium II is above 366MHz/400MHz or if your DVD runs smoothly, you can skip the step).
- ○ In the windows system, click [Start]; select [Setting], [Control Panel], and [System]. Open [Device Manager]; select [CDROM]. Click the item including the type of [DVD-ROM], and [Setting]; then enable [DMA] in Options.
- ○ Insert the CD of Ati-DVD-Play application and the program will automatically run the installation until finished. Otherwise, click [Start] in the windows system. Select [Run]. Open the path [D:\Atiplay\setup.exe]. Run [setup.exe] to finish the installation.

Installing Drivers in Windows NT 4.0

Note:
After installing Windows NT4.0, please install Service Pack3 to enhance the
function. Download the latest Service Pack3 version from the Microsoft web site.

Step 1: Installing VGA Driver

❍   Click "Start".
❍   Select " "Settings".
❍   Click "Control Panel".
❍   Select "Display".
❍   Click "Settings".
❍   Select " Display Type", and then select "Change".
❍   Click "Have Disk".
❍   Select "Browse" to specify the location.
❍   Open the path "D:\VGA\NT4.0".
❍   Click "OK". (All appropriate files are then copied to the hard disk.)
❍   Restart WinNT4.0 system.

Step 2: Installing Audio Driver

❍   Click "Start".
❍   Select "Settings".
❍   Click "Control Panel".
❍   Select "Multimedia", and then select "Devices".
❍   Click "Add" and "Unlisted or Updated Driver", "Ok".
❍   Select [Browse] to open the path [D:\audio\NT4.0]
❍   Select "OK".
❍   Restart NT 4.0 system.

Appendix A: Specifications

The following are the features and specifications of the DeskNote computer:

⌨ **Processor**
- Intel® Celeron^{TM} processors with 128KB integrated full speed L2 cache. (Packaged in a 370 pins PPGA Socket)
- Intel Mobile Pentium II / Celeron processor. (Packaged in BAG to PPGA transfer card)

⌨ **Memory**
- Provide 64-bit data bus system memory
- Two 144 pins SODIMM sockets, support 3.3V EDO, Sync DRAM SODIMM EDO DIMM: must use 60ns or faster, Sync DRAM SODIMM: must use 75 MHz or faster
- Expandable memory up to 256 MB, depend on 16 / 32 / 64/ 128 MB SODIMM Module

⌨ **System BIOS**
- One 256KB Flash ROM
- SystemSoft BIOS with Smart Battery
- Plug and Play (1.0a)
- ACPI 1.0 256KB Flash ROM

⌨ **Display**
- XGA TFT flat panel 13.3" / 14.1"
- AGP 2X
- Complete 64-bit hardware 2D / 3D Accelerator Graphics Engine
- Motion Compensation
- High quality TV-out (6 Line buffer quality) with MacroVision® V7.01 anti-copy technology
- 4MB display memory SGRAM type (100MHz)
- Vertically Interpolate 720V x 480H pixel wide video source
- Support TFT panel resolution up to 1024x768x16M
- CRT resolution up to 1280x1024x16M (non-interlaced)
- TV resolution 1024x768
- Tri-view^{TM} for triple display devices, TV, CRT and LCD
- Support Zoomed Video Port
- Support Software MPEG II

Storage
- One removable intelligent bay for 3.5" 3-mode FDD / 12.7 mm(h) LS-120/ 2.5" 12.7mm(h) 2nd HDD/ 2nd Battery
- One easy change bay for DVD-ROM(12.7mm) / CD-ROM(24X speed or up)
- Removable 2.5" 12.7mm (h) HDD, support LBA mode
- Support DMA mode 2/ PIO mode 4/ ATA-33 (Ultra DMA) IDE

Audio
- 3D stereo enhancement sound system
- Full duplex support
- Compatible with Sound-Blaster PRO™ version 3.01
- Built in microphone
- Built in 2 speakers
- Wavetable Download

PC Card Sockets
- Two (PCI) PCMCIA 3.3V/5V sockets , type II x2 or type III x1
- Support Zoom Video Port (Socket A)
- CardBus (PC Card95)

Input/Output
- Built in Trackpad (PS/2)
- Dual USB ports
- One serial port
- One parallel port (LPT1)
- One Infrared (FIR) file transfer
- One external CRT monitor
- One S-Video jack for TV output
- One External keyboard / Mouse (PS/2 type) port
- One line-in jack
- One headphone jack
- One microphone jack
- One RJ-11 jack for 56K v.90 (Option)
- One (120 pins) connector for Port Replicator
- DC-in jack

Infrared Wireless Communication
- Wireless Infrared: 4M bps data rate/ 1cm ~1M operating distance, and compliant with IrDA 1.1 or ASKIR (SHARP standard)
- 56K S/W Modem (Option)

Power Management
- Support ACPI v1.0
- Support APM v1.2
- CPU Over Temperature Protection
- Device Power Management for all devices
- Support suspend to disk (APCI mode exclude)
- Battery low suspend
- Resume from alarm time/modem ring (Com Port only)

Power
- Full Range AC adapter – AC in 100~240V,47~63Hz.
- Support two packs, removable Lithium-Ion Battery or Ni-MH Battery

Size & Weight
- 316(w) x 256(d) x 38.5(h) mm^3
- 3.5 kg

Keyboard
- A4 size Win 95 keyboard